

Current HISTORY

A WORLD AFFAIRS JOURNAL

JANUARY, 1989

Toward the 21st Century

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*This anniversary issue, **Toward the Twenty-First Century**, continues Current History's long-established tradition. Between 1914 and 1989, our pages have reflected the main themes of American history—from America's role in World War I to revitalized efforts in the 1980's to reach a new détente with the Soviet Union. This special issue is divided into two sections. The first section discusses the problems of the world tomorrow; the second section (which begins on page 20) is a retrospective of earlier articles from Current History.*

SECTION I: THE WORLD TOMORROW

As Current History moves into its second 75 years and approaches the twenty-first century, new problems are coming into clearer focus: problems of global security, population pressures, technological changes, the changing American economy and its influence on the world's regional trading blocs, and the threatened world environment. Articles in section I of this issue deal with these problems. Our first article notes that "The demise of the bipolar world can no doubt be delayed . . . but it will come."

Global Security: Approaching the Year 2000

BY GEORGE W. RATHJENS

Professor of Political Science, Massachusetts Institute of Technology

FROM the perspective of the advanced industrial countries, the central security issue since World War II has been the military and political competition between the East and West: the "cold war," so frightening because of the immense destructive potential of the nuclear weapons stockpiles of the principal protagonists.* For the rest of the world there has been regional conflict, much of it related to the demise of the great colonial empires and much of it exacerbated by the propensity of Moscow and Washington to exploit such conflict—and indeed, at times, to foment it—in extension of their own contest for power and influence.

It is issues of this genre, conflict and the threat of it, that are the focus here, although it is clear that there are other issues that surely must, in a large sense, be seen as pressing matters of security: for the developing countries, hunger, overpopulation, debt, and the maldistribution of the world's resources; for the superpowers, economic competi-

tiveness with the other industrial states; and for virtually all nations, terrorism, drugs and the despoliation of the environment.

The question arises as to whether fundamental changes are now under way or in prospect as regards arms and conflict; in particular, whether the cold war may be coming to an end, and whether arms, and especially nuclear arms, will continue to be so demanding of resources and so important in international relations. A number of developments are indicative of change. These include changing perspectives everywhere on the relative importance of military and economic factors as indices and instruments of power; some discrediting of nuclear deterrence on moral grounds in the United States, partly as a consequence of positions taken by the churches and President Ronald Reagan; and the reform movement involving glasnost (openness) and perestroika (restructuring) now under way in the Soviet Union.

Yet Western, and particularly American, defense and foreign policy continue to be predicated largely on continuity with this past or, to be more precise, on the retrogression and revival of the adversarial relationship between East and West that

*This paper draws heavily on a paper prepared for a meeting of the Aspen Strategy Group, *American Defense Policy in the Post-Reagan Era*, July 21, 1988. I am indebted to Laura Reed and Katherine McGraw for helpful criticism and the Carnegie Corporation of New York for partial support.

antedated Soviet General Secretary Mikhail Gorbachev's accession to power in the Soviet Union. If one is to judge by opinion polls and the presidential campaign of 1988, the American public, even though welcoming Gorbachev's initiatives, seems to be persuaded—along with most of the “establishment”—that prudence demands that the West act on this assumption.¹

Such conservatism is likely to be counterproductive. Certainly, the Soviet Union does not seem to be in an expansionist phase, and the “correlation of forces,” to use Soviet terminology, so strongly favors the West that there would appear to be little risk in heavily discounting a near- or medium-term Soviet military threat. At least, we should heavily discount a deliberate Barbarossa-type attack against West Europe and a deliberate Pearl Harbor-type attack against American strategic forces, although these scenarios have been the main rationales for NATO (North Atlantic Treaty Organization) defense policy and American policy relating to strategic nuclear forces, arms control and disarmament.

Once these threats are discounted and other threats that seem more realistic are considered, and opportunities for constructive change in international relations are discussed, radical change in defense and foreign policy is implied.

Gorbachev obviously came to power recognizing that the Soviet economy and its political structure were in need of fundamental reform.² It had become apparent both inside and outside the Soviet Union that without change the Soviet Union could not compete effectively with the advanced industrial countries of the West and Japan. National income growth rates had fallen dramatically—from 41 percent during the eighth five year plan in 1966–1970 to 16.5 percent during the eleventh plan. The country faced serious problems in health care, a continuing high infant mortality rate, actual decreases in expected longevity, and persistent housing and food shortages. Moreover, the Soviet Union—indeed, the whole Soviet bloc—faced a serious problem in international trade. Because of low quality, its manufactured products could not compete with those offered by others; it became more dependent on food imports; and there was an erosion in earnings from sales of oil, which had been its main earner of foreign exchange.³

¹What I characterize as the “establishment view” is well developed in Graham T. Allison Jr.'s “Testing Gorbachev,” *Foreign Affairs* (Fall, 1988).

²See for example Mikhail Gorbachev, *Perestroika: New Thinking for Our Country and the World* (New York: Harper & Row, 1987).

³Abel Aganbegyan and Timor Timofeyer, *The New Stage of Perestroika* (New York: Institute for East-West Security Studies, 1988).

And the Soviet Union had hardly been successful in exporting its revolution: China had gone its separate way; the Communist parties had never come to power in France or Italy, and were unlikely to; the Communist revolution in Indonesia had failed; Cuba had turned out to be arguably more a liability to the Soviet Union than an asset; and the move into Afghanistan had proved to be a costly mistake.

While the Soviet Union had made impressive strides in the military sector, having caught up with the United States in nuclear delivery means during the 1970's and narrowed the qualitative gap in other areas, it faced the prospect of continuing to run second in any determined competition to exploit technology for military ends, even if it continued to devote enormous effort to that competition. The Gorbachev reform efforts followed.

There have been some important—and possibly portentous—results. First, Gorbachev has moved with great rapidity, assurance and, apparently, success in consolidating his control over the Communist party and the politics of the Soviet Union.

Second, glasnost has gone very far, and this has led to extensive discussion and one presumes some appreciation in all strata of Soviet society of the past mistakes and current problems that confront it.

Third, there have been dramatic initiatives from Moscow and changed attitudes relating to arms control and disarmament, including its unilateral moratorium on nuclear weapons testing, its acceptance of the American proposal to eliminate Intermediate-range Nuclear Forces (INF), and its accession to the Conference on Security and Cooperation (CSCE) agreement in 1987 relating to military maneuvers in Europe. And Moscow has been willing to accept remarkably intrusive verification provisions for these and other arms control and disarmament measures.

Fourth, even the most hardened cold warriors in the West seem to think that Gorbachev is sincere in his belief that the Soviet Union must turn inward to deal with its economic problems. At least among Sovietologists and experts on military affairs, there seems to be a consensus that Gorbachev is also sincere in his intent to bring about a restructuring of Soviet (and Western) military forces and doctrine, downplaying offensive capabilities, so the postures of both sides will be perceived as less threatening.

The overall effect has been to create a widespread worldwide impression that the Soviet Union is a more responsible member of the world community, and far less of a threat to the peace than it was under General Secretary Leonid Brezhnev.

Certainly, there is in all this a basis for applause and optimism, but all is not well. There is to date little evidence of actual major change in Soviet

military doctrine or in the structure and deployment of Soviet military forces, aside from the partial withdrawal from Afghanistan.⁴ And Gorbachev's efforts to restructure the economy are not yet producing significant results.

It can be reasonably argued that it is too early to expect real change in Soviet force posture, but that ultimately Gorbachev's views will prevail on matters of defense policy. The shake-up in the Soviet military leadership—including the appointment of Dmitri Yazov (with non-Politburo status) as minister of defense, the development of new centers of military analytical capability outside the defense establishment, the reversal of the Soviet position on intrusive verification of arms control and disarmament measures, and perhaps the withdrawal from Afghanistan are examples of Gorbachev's willingness to move in ways not likely to be greeted with much enthusiasm by the military. But, as yet, there is little, if any, slackening in Soviet military expenditures, and perhaps little more than lip service is being given to increased emphasis on defense as compared with offense. It is likely that there will be significant resistance from within the military establishment to these changes—and to the concept of military sufficiency, which Gorbachev also favors.

More serious has been the resistance—or perhaps just as worrisome, the nonresponsiveness—of the nation to Gorbachev's attempt, with "perestroika," to impose a revolution, not only a political but an economic and, indeed, a cultural revolution from the top. He is clearly not alone in

recognizing that very far-reaching changes are needed "to get the country moving again"—he seems to have the intelligentsia largely with him—but for large elements in the society the prospects are loss of privilege and/or security, so far, at least, with no compensatory benefits.

Among the intelligentsia there seems to be an almost palpable skepticism; there is a sense, more evident in 1988 than in 1987, that unless there is some tangible evidence soon of improvement in the performance of the Soviet economy, Gorbachev will be in trouble, however impressive his performance may be in both the domestic and the international political arenas.⁵ In a word, one has to see this period—the end of the 1980's and perhaps the early 1990's—as a critical period in Soviet history and hence critical for international security.

THE COLD WAR WORLD

It may be that the Gorbachev reform efforts will prove to be only a flash in the pan: that perestroika will fail, and that we will simply see a turning back of the clock during the next few years. This is essentially what happened when General Secretary Nikita Khrushchev was removed from power; particularly with Khrushchev in mind, it is not surprising that in conservative circles in both the East and the West this is an important vision. It is a vision that comforts many, particularly in the United States, West Europe and Japan. While there has been conflict in the third world, the prospect of truly catastrophic nuclear war involving both the superpowers has seemed fairly remote since the Cuban missile crisis. Moreover, the presumptions of continuity with the past provide a reason not to question the need for a whole range of institutions that have developed during the cold war: alliance structures and other international commitments, military-industrial complexes, and allocation patterns of national resources.

Describing such a world is easy; we are all so familiar with it. For the Soviet Union it would mean further ossification, xenophobia, suppression of dissent, continuing allocation of a very large fraction of its resources to the defense sector, attempts to make the most of its military strength in international relations, and a search for scapegoats for its failures outside the Soviet Union and, within it, outside the party. Looking outward, its foreign policy would likely be risk-averse but opportunistic and, with respect to East Europe, interventionist. Such a Soviet Union would appear more threatening than that of Gorbachev's Soviet Union thereafter, and a rallying of allies and the American public to American leadership could be expected.⁶ NATO would have a new lease on life. The United States and the Soviet Union would each look for—and,

⁴For a discussion of General Secretary Gorbachev's effort to seize control of the agenda for Soviet defense policy and resistance to change see particularly, Stephen M. Meyer, "The Sources and Prospects of Gorbachev's New Political Thinking on Security," *International Security*, vol. 13, no. 2 (Fall, 1988); "General Secretary Mikhail Gorbachev and the Soviet Military: Assessing His Impact and the Potential for Future Changes," *The Defense Policy Panel of the Committee on Armed Services, United States House of Representatives*, September 13, 1988.

⁵This impression is based mainly on private conversations with Soviet intellectuals during the summers of 1987 and 1988. It is reflected, in addition, in Soviet writings. Compare Gorbachev, op. cit.; Aganbegyan and Timofeyer, op. cit.; and Gorbachev's speech of last September in Krasnoyarsk, *Red Star*, September 18, 1988.

⁶This would be in contrast to the present situation, where there are fairly sharp divisions within the United States and within some of its West European allies, between those who believe that the Soviet Union really has turned a corner in its attitudes and policies toward the rest of the world and those who are profoundly skeptical. Other intra-alliance problems also stand in the way of Western consensus. Notably, there is the fact that notwithstanding formal agreement on NATO's policy of "flexible response," most Europeans who worry at all about a threat from the East are, in contrast to most Americans, at heart committed to the idea that the preferred defense for Europe is one that deters through the threat of an early and catastrophic escalation in the event of conflict.

whether actually there or not, find—the hand of its adversary in conflicts in the third world, and this would provide a rationale for intervention (and for the maintenance of military forces for such intervention), whether or not there were really vital national interests at stake.

Some East-West cooperation on global environmental and health problems, in science, and in international trade might be expected, limited and colored, however, by the adversarial nature of their relationship. With little hope in this hypothesized environment of the resolution of fundamental differences between East and West, one might expect efforts in arms control and disarmament not greatly different from those that we have seen over the last 20 years, undertaken with the multiple objectives on each side of improving its military position vis-à-vis its adversary, reducing uncertainties and possible sources of instability in the competition, and generating political support both at home and abroad. For Soviet leaders, creating divisiveness in the relations between the United States and its allies would be an additional motive. While there would probably be some arms control and disarmament “successes,” the overall effect of such efforts could well be—as has been the case in the past—as much to generate and sustain support for questionable weapons development and acquisition programs as to constrain them.

Retrograde movement along these lines may be likely, but if it does occur, the world would seem to be fundamentally unstable. The failures of the “old thinking,” not only in the Soviet Union proper but throughout the rest of East Europe, are now too evident.⁷

In these circumstances, it seems unwise for the West to maintain a steady course in defense and foreign policy while looking for assurances that there will not be a simple turning back of the clock in the Soviet Union. Rather, Western policy should be changing to reflect the fact that whether Gorbachev succeeds or fails, the Soviet Union is not going to be the same again. New opportunities and daunting challenges for global security merit far more attention than they are now receiving.

A DIFFERENT SCENARIO

The “best case” projection has to be a successful

⁷Attitudes in the West would be perhaps more easily reversed, assuming a turning back in the Soviet Union, but not as easily as twenty years ago. Memories of the worst excesses of the cold war—the invasions of Hungary and Czechoslovakia and the Berlin and Cuban crises—are fading. And there is probably a greater disenchantment now than then with nuclear weapons, and particularly with the concept of nuclear deterrence.

⁸See a penetrating and, from a Soviet perspective, devastating discussion of this and related issues in William Pfaff’s “The Question Not Asked,” *New Yorker*, August 1, 1988.

implementation and extension of Gorbachev’s “new thinking.” In terms of external relations this would mean (1) implementation of changes in Soviet military posture and deployments along lines that would be perceived as less threatening, and would surely have to include withdrawal of Soviet military forces from East Europe and those remaining in Afghanistan; (2) commitment that the Soviet Union will abstain from the use of military force in these areas and elsewhere unless they are subject to external attack; and (3) commitment to playing a constructive role in the United Nations, including support of its peacekeeping operations, and to the peaceful adjudication of international disputes through the International Court of Justice and other instruments.

The dark side becomes apparent when one considers that chaos and conflict seem much more likely than the reinstitutionalization of “old thinking” should Gorbachev and any like-minded reformers fail. Revolution may go further and in a less orderly way.

While one still notes obeisance in the Soviet Union to the idea that salvage and reform can be effected within a Marxist-Leninist framework, increasingly it seems that obeisance is not grounded in conviction. And the outside observer finds it hard to imagine that the problems of meeting consumer demand and competitiveness with modern industrial states can be solved without accepting the necessity for trade-offs between equity and efficiency that will undercut in a fundamental way a key element in the very basis of legitimacy in the Soviet state.⁸ It seems likely that it will also be necessary to go far beyond what has been acceptable not only within Communist Russia but in all Russian history in the acceptance of pluralism, incentives for individual initiative, and decentralization of decision-making.

The question arises as to whether change can occur *in an orderly way* with sufficient rapidity to satisfy the demands of the more dynamic elements in Soviet society for improvement in the quality of life. Disruptive and possibly violent clashes between different interest groups seem not unlikely.

More directly relevant are the questions of the Soviet Union’s military intervention around its borders. While there have been assurances that this

(Continued on page 48)

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"The dramatic changes that have been wrought by rapid, and seemingly limitless, development of science and technology naturally have given rise to a belief that those fields can, under the right conditions, solve all problems. Experience, sometimes bitter, has shown how misplaced is that view."

Technology and the World Tomorrow

BY EUGENE B. SKOLNIKOFF

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TECHNOLOGY is a pervasive and deceptive subject. It obviously has been a major factor in the transformation of society, and continues to be so.* Yet, notwithstanding its apparent hard factual character, rigorous analysis of its role in domestic or international affairs has not been easy. Anticipating the societal effects of future technological developments is even more difficult, though clearly of great importance. The difficulty stems in part from the unavoidable uncertainties of future technological change. But it also, even primarily, stems from the ubiquity of technology in the society, and the resulting challenge of separating technology from the multitude of other variables with which it interacts.

As a result, identifying technological trends and one by one exploring their likely impact in specific policy areas could at best be only partially successful. It belies the intimate interaction of technology with politics, with economics, with social policy more generally, and even with other technology; it tends to give undue weight to new technologies as opposed to changing technological capabilities; it usually overvalues effects of dramatic technologies compared to cumulative effects of incremental change; and it denies the feedback from policy to the development of technology itself.

Four generalizations about technology and its interaction with policy are worth noting as a preamble, since they are so often misunderstood or not recognized in consideration of policy, and are particularly relevant to the future policy environment.

- Technological change does not lead to immediate and dramatic social change, as often portrayed in "futures" literature. Social change evolves through the impact of incremental developments in which technology is but one factor. Most new technologies, even seemingly radical ones, lead to social effects through an evolutionary process of social learning rather than sudden quantum shifts. It

may be arguable that the advent of atomic energy as a usable technology is one exception. Even if it is, there are not likely to be any others in the near future.

- There is no such thing as a pure technological fix. That is, technology alone cannot be expected to solve an important societal problem without creating new social, economic, and political problems along the way, or in its wake. Technology can change the weight of the relevant factors, bring in new actors, and alter the costs and benefits. That is substantial; however, the societal consequences of technology—often unanticipated—mean that to turn to technology as an unencumbered way to solve a serious political problem is a delusive goal.
- As a corollary, all important technological issues in international politics must ultimately be dealt with in political terms. Technological factors are relevant, sometimes crucial, to understanding and dealing with many issues; but the policy choices of which technology is a part are not predetermined by technology. They will always finally turn on the political aspects.
- Technological development does not happen independently of human direction. Though there is a sense in which technological change has a certain independent momentum, for policy purposes it is important to recognize that allocation choices in R&D (research and development) do affect the characteristics of the resulting technology. At the same time, the cumulative effects and dispersed sources of technology continually create new and usually unforeseen requirements for policy. In effect, technology is both a dependent and an independent variable in the policy arena.

THE INTERNATIONAL ECONOMY

There are many dimensions to the interaction of technology with the international economy. Probably the most far-reaching is the enormous expansion in international transactions, trade, transborder data flows, movement of capital, and internationalization of business occurring in Western economies. Advances in communications and in-

*This edited selection appears with permission from the upcoming monograph *Technology and Change in East-West Relations*, F. Stephen Larabee, ed. (New York: The Institute for East-West Security Studies, 1989).

formation technology have made these possible and profitable; the result has been major alteration of the international economic system, with much greater interlocking of economies and mutual dependence among them. This is not a completed change, but one that shows every sign of continuing, perhaps even accelerating. It is certain to affect the substance and the environment of East-West relations in many ways.

At the most general level, the continued expansion of international economic relationships that serves so intimately to couple Western economies will increase the pressure for coordination of national economic, fiscal and monetary policy. Governments have tended to resist such coordination, fearing loss of domestic control; that response may be a luxury no longer possible, even for major economic powers. But, the same technological developments that lead to close coupling of economies and industry also encourage powerful transnational industrial relationships able to operate outside easy supervision by governments. The ability of Western nations to intervene decisively to control specific subjects such as the movement of technology, or to regulate the transborder flows of data and information, or even to achieve broader economic policy purposes, is thus likely to be even more uncertain than it is today.

As far as the Soviet Union is concerned, there is little reason to expect appreciable narrowing of its high-technology gap with the West without extensive changes in economic structure. Soviet General Secretary Mikhail Gorbachev seems clearly to understand this, but the kind of changes required to improve substantially the Soviet Union's capacity for technological innovation—for example, decentralized decision-making, loosening of controls over information flow and computers, restructuring of industry to create incentives for innovation and to encourage independent initiative—will pose major, perhaps fundamental, challenges to the entire Soviet political system. If the changes were to be made, the political as well as economic climate for relations between East and West might be very different indeed. Without them, there is little reason to believe the Soviet Union's lag with respect to Western technology will decrease, or that its dependence on the West for technology will diminish. Note that this technological lag is largely independent of Western attempts to deny advanced technology. American programs to limit technology flow have in fact done more harm to American industry than they have hampered the Soviet Union.¹

¹National Academy of Sciences, National Academy of Engineering, Institute of Medicine, *Balancing the National Interest: U.S. National Security Export Controls and Global Economic Competition* (Washington, D.C.: National Academy Press, 1987).

It is worth noting that technology will also be a factor in *reducing* the importance to industrialized countries of some traditional geopolitical concerns. For example, application of science and technology to agriculture has drastically altered the nature of food dependencies. Global food production, for many years to come, can be adequate to feed the world's population, though economic, political, and institutional problems may interfere with the actual distribution of food to those who need it. The Soviet Union may still have to depend on food from outside its borders because of internal problems of production and distribution, but there need be no shortage of available food, and of willing suppliers. Resource dependencies in the future are also likely to be less important factors in international relationships, as the growth of technology makes it possible to find substitutes or bypass the need for scarce resources or to increase the overall efficiency of their use.

The economic effects on nations dependent on export of mineral resources, however, will be severe; copper, for example, may never recover from the move to optical fiber transmission lines. Oil will be the major exception to reduced resource dependencies, as technology has not yet been successfully applied to the development of economically suitable alternatives, and consumption in the West is increasing again. Clearly, that dependency on oil could once again become a major international issue, with the Soviet Union possibly benefiting financially and politically as an oil exporter in its dealings with the West.

MULTINATIONAL AND GLOBAL ISSUES

One of the characteristic effects of an increasingly technological world is to make interaction among nations more intense and at the same time unavoidable. This century has seen the application of technology in many fields such as health, space, weather, agriculture, pollution, and others that has then required international or multinational action of some sort, either to deal with the effects of the technology, or to reap its benefits. These developments in "functional" subjects have brought about important cumulative changes on the international scene, but have only occasionally been seen as being at the heart of contemporary international politics.

However, this may change as some of the issues become of much greater direct significance to the major industrial nations. In fact, in a few cases there could be profound effects on the fate of all peoples and nations, with a possible requirement for cooperative action, especially among the nations of East and West, that goes beyond any previous experience. In particular, four issues stand out

though on quite different time scales. One is the danger of radioactive pollution as a result of nuclear accidents, the second the so-called greenhouse effect arising from CO₂ accumulation, the third the prospect of a worldwide AIDS (acquired immunodeficiency syndrome) epidemic, and the fourth the effects of population change. All deserve brief comment.

• Radioactive Pollution

Environmental pollution across borders and globally is an issue that reached political prominence on the international political scene at the time of the Stockholm Conference in 1972, though of course international environmental problems have been around much longer. None of the pollution issues of that time or since, including acid rain and Rhine River chemical spills, had as severe political repercussions as those caused by the 1986 Chernobyl accident. Its effects throughout Europe, the intense pressure on the Soviet Union to provide unprecedented amounts of information, and the political demand for international planning for possible future nuclear problems have created a deep sense of the intimate linkage of Eastern and Western Europe, at the least, in the face of new and dangerous technologies. The reaction was amplified by the pervasive psychological reaction to anything nuclear. Whether this accident and its aftermath will significantly affect political relations depends on many other factors, including whether there are any nuclear accidents in the near future, and what success antinuclear and other "green" political parties will have. It is bound to lead to some increased interaction and advance consultation on sensitive environmental issues; whether it goes beyond that politically will depend on the importance accorded to such issues in calculations of national interests.

• The Greenhouse Effect

An environmental issue of a different kind is looming on the horizon, with major impact well into the next century, but with action required in the near future either to ameliorate that impact or to prepare for it. The issue is the so-called greenhouse effect which will result from the accumulation of CO₂ and other gases in the atmosphere, in time causing a change in the heat balance of the planet. These gases are the product of burning fossil fuel, of greater use of fertilizers, of increased animal hus-

²National Research Council, "Changing Climate: Report of the Carbon Dioxide Assessment Committee" (Washington, D.C.: National Academy Press, 1983).

³There is one scenario that would be catastrophic: the loosening and sliding into the sea of the West Antarctic ice sheet, which would raise sea levels around the world about 10 meters. This cannot be ruled out, but scientists now believe this would occur over a quite long time period, if it occurred at all.

bandry, of deforestation; in other words, the product of a larger, wealthier and more industrialized global population. Climatic changes at the surface, when CO₂ in the atmosphere has doubled, are expected to be substantial, with predicted rises of 3 °C (+/-1.5°) at the equator, and twice as much at the poles.² For comparison, this would be a larger temperature change than at any time since the ice ages. The time at which effects on this scale will occur is not certain, depending importantly on the rate of burning of fossil fuels and the contribution made by other gases, the latter now predicted to equal the effects of CO₂. 1985 estimates place the time of doubling as 50 to 100 years, that is between 2035 and 2085, but detectable effects could occur much earlier, even in the 1990's.

The specific consequences at the surface are not yet predictable in detail, but will surely involve major changes in precipitation, average temperature, cloud cover, sea level, and the frequency and severity of storms, droughts, and temperature extremes. In turn, these changes will, inter alia, alter the fertility of present agricultural areas and of some not now suitable for agriculture, lead to increased desertification, inundate some coastal areas, cause changes in food supply and availability, alter normal climate and weather patterns, and modify the animal and insect population. In short, the effects are likely to be substantial indeed. Contrary to some of the apocalyptic literature, however, it is not at all certain that on a global basis the effects will be catastrophic.³ Food production worldwide might actually increase, and presently uninhabitable areas would become suitable for settlement.

What does seem clear at this time is that there will be winners and losers, and that some of the measures of power and influence, even of major nations, will be altered. Certainly, the economies of the nations of East and West will be affected, as the Soviet Union, for example, may ultimately benefit from greater access to and use of Siberian land and resources. New dependencies and interactions dictated by the new situation are likely to be created in ways that will affect East-West relations, and global politics generally, in the long run. The impact up to the turn of the century will grow out of greater consciousness of the magnitude of the phenomenon and its worldwide consequences. Substantial curtailment of fossil fuel consumption—the one step that would most affect the problem by delaying its arrival—is not a politically realistic option, though greater efficiency of use would help. But, it can be anticipated that governments of major scientific countries will feel much increased pressure to engage in cooperative research on the phenomenon itself, and in cooperative planning for coping with its effects.

• AIDS

Another issue normally removed from the political center of international affairs is health. The onset of a worldwide AIDS epidemic may, however, markedly alter that situation. It cannot be known for sure what the dimensions of the problem will be, but there is every possibility that AIDS will spread to all elements of society, and that the world will be faced with a disease that approximates the scope and impact of the bubonic plague; perhaps much worse.⁴ It is even possible that mutations of the virus might make the disease more easily transmitted, and thus even more serious than now perceived. The only known hope to minimize the epidemic (other than draconian control of sexual relations) is progress in science and technology, and that can be hope only. If it were not for recent progress in molecular biology, there would be no reason even for hope for relief.

It is not at all beyond reality that AIDS, and the measures needed to cope with its effects, could become a major element in international affairs, and thus in East-West relations. National security issues will not be forgotten, and perhaps not directly affected at all. But they may also be seen as less significant and more easily resolved in the face of the psychological stress of an unprecedented health crisis.

• Population Change

Global population growth, aided and abetted by technology over the years, affects many issues that will increasingly influence the environment of international relations: migratory pressure, growing North-South economic disparities, and competition for land and water resources worldwide. However, one aspect of population change, made possible by technology, is often ignored. That aspect is the *decline* of population of many countries of Western Europe, and of the populations of European origin in the United States and the Soviet Union. The population of the Federal Republic of Germany, for example, is projected to decline by fully one-third every generation (27 years), and the fertility rate in the United States is now below the "replacement" rate, with the population continuing to rise because of immigration.⁵

The effects of these changes will be felt largely after the turn of the century, with many problems for domestic policy: a growing proportion of elderly and particularly women, a reduced work force, ex-

panded need for social services, and others. The international repercussions will also be substantial, however, for example in the availability of manpower for military service, changes in national economic performance, and possible changes in the relative priority given to international interests by electorates. The effects of these changes are little explored, but could affect international relations significantly early in the next century.

INFORMATION/COMMUNICATIONS

The "information revolution" is a cliché that, in fact, is an apt title for the continuing technological developments in computers and communications contributing to dramatic societal changes. Their impact on the international economy has been discussed earlier. Another, perhaps more significant impact has to do with their role in evolution of national culture and of political attitudes as the new technologies allow the massive intrusion of ideas and information from abroad, and make possible new modes of unsupervised interaction among individuals within and between societies. Policies that attempt to limit the flow of information, especially as direct broadcast satellites are deployed, and to control access to new computer technologies, are likely to become more difficult, and ultimately ineffective. They certainly would be incompatible with building a competitive modern society. The political implications for all countries, but particularly for those that have traditionally attempted to control information flows and to limit the use of technology, could be dramatic.

Unfortunately, the reverse side of the coin also is feasible; the possibilities these technologies offer for influencing public opinion in organized ways that could directly impede, for example, improvements in relations between East and West. Or, of deeper concern, is the possibility of using these information technologies to establish authoritarian control of a society or to attempt to undermine a society from abroad. This conflict among the various goals toward which technology can be applied, a typical and inevitable problem with most technologies, is certain to be characteristic of the applications of these technologies long into the future.

TECHNOLOGY AND SECURITY RELATIONS

It would be difficult to overstate the role of technology in altering military-security issues, especially since World War II. The direct effects of

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⁴Erik Eckholm, "AIDS, an Unknown Disease before 1981, Grows into a Worldwide Scourge," *The New York Times*, March 16, 1987.

⁵Jane Menken, ed., *World Population and U.S. Policy: The Choices Ahead* (A report of the American Assembly, Columbia University) (New York: W.W. Norton, 1986).

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"... during the past four generations humans have . . . learned more than all humans learned in all the preceding millennia about the complexity of the biosphere, about its amazing resilience, about the ways of using and managing the ecosystems in sustainable ways. . . . In the long run, the rise of environmental consciousness will have effects comparable to the consequences of the last three great Western transformations — the Renaissance, the Reformation and the Industrial Revolution."

Our Changing Environment

BY VACLAV SMIL

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SEVENTY-FIVE years ago the age of the explorer was coming to a close. Although another generation was to pass before the last isolated tribes of New Guinea were contacted by outsiders, successful journeys to the poles—Robert Peary's Arctic trek in 1909 and Roald Amundsen's Antarctic expedition in 1911—removed the designation of *terra incognita* from the two most inaccessible places on Earth.¹ Four centuries of European voyaging had accumulated a mass of descriptive information about the lands, rivers, oceans and living organisms of the planet, and most of this knowledge had been admirably systematized in such great feats of early science as Carolus Linnaeus's classification of biota, Alexander von Humboldt's sweeping writings and the maps of the British Admiralty.

But our understanding of how the environment actually works was still primitive. To list just a few key examples: flourishing biochemistry was laying the foundations for understanding the complexities of grand biospheric cycles; Charles Darwin's theories were turning attention to the interplays between organisms and their surroundings; and physiologists were offering coherent insights about the nutritional needs of plants, animals and men.

But the blanks dominated: the absence of sensitive, reproducible analytical methods precluded reliable monitoring of critical environmental variables; Wilhelm Bjerknes set down the basic equations of atmospheric dynamics in 1904—but clim-

atology remained ploddingly descriptive for several more decades;² the need for an inclusive understanding of living systems was in the air—but the fundamental quantitative tenets of ecology were still unknown.

If science was on the verge of great discoveries, so was the everyday treatment of the environment. New attitudes to protect unique natural settings and the first environmental control techniques were emerging after a century of rapid industrial expansion that treated land, water and air as valueless public property: the final decades of the nineteenth century saw the establishment of the first large natural reserves and parks, and the new century brought primary treatment of urban waste water and the invention of electrostatic cleaning of ash-laden flue gases.

The two world wars and the intervening generation of economic turmoil were not conducive to gains in environmental protection, but science made some fundamental advances. In 1925, Alfred Lotka published the first extended work that established biology on a quantitative foundation.³ In 1929, Vladimir Ivanovich Vernadskii ushered in the study of the environment on an integrated, global basis with his pioneering book on the biosphere.⁴ In 1935, Arthur Tansley defined the term ecosystem, one of the key terms of modern science.⁵ And in 1942, Raymond Lindeman, following Evelyn Hutchinson's earlier ideas, published the first quantifications of energy flows in an observed ecosystem.⁶

Meanwhile, the environment of industrialized countries continued to deteriorate. Three pre-1914 classes of innovations commercialized between the world wars accounted for most of this decline. The thermal generation of electricity, accompanied by emissions of fly ash, sulfur and nitrogen oxides and by a huge demand for cooling water and the consequent warming of streams, moved from isolated city systems to large-scale integrated regional and national networks.⁷

The automobile industry shifted from workshop

¹Jared M. Diamond, "The Last First Contacts," *Natural History*, vol. 97, no. 8 (1988).

²Hans Panofsky, "Analyzing Atmospheric Behavior," *Physics Today*, vol. 23, no. 12 (1970).

³Alfred J. Lotka, *Elements of Mathematical Biology* (Baltimore: Williams and Wilkins, 1925).

⁴Vladimir Ivanovich Vernadskii, *La Biosphere* (Paris: Felix Alcan, 1929).

⁵Arthur G. Tansley, "The Use and Abuse of Vegetational Concepts and Terms," *Ecology*, vol. 16 (1935).

⁶Raymond L. Lindeman, "The Trophic-Dynamic Aspect of Ecology," *Ecology*, vol. 23 (1942).

⁷Thomas P. Hughes, *Networks of Power* (Baltimore: Johns Hopkins University Press, 1983).

manufacturing to mass production, which made cars affordable for millions of people. The emissions of unburned hydrocarbons, nitrogen oxides and carbon monoxide spread over urban areas and into the countryside, which was increasingly buried under asphalt and concrete roads.⁸ And the synthesis of plastics grew into a large, highly energy-intensive industry generating a variety of toxic pollutants previously never present in the biosphere, introducing huge numbers of nondegrading wastes into the environment.

Post-1945 developments amplified these trends. New environmental risks were introduced as the rich world entered the period of its most impressive economic growth, terminated only by the 1973-1974 quintupling of oil prices. In just 25 years, the consumption of primary commercial energy nearly tripled, electricity generation grew about eightfold, car ownership increased sixfold and production of most kinds of synthetic materials grew more than tenfold.⁹

New environmental burdens were introduced to farmlands and other ecosystems as the rapidly expanding use of nitrogenous fertilizers (derived from synthetic ammonia first produced in 1913) and the growing applications of the just-discovered pesticides (DDT was first used on a large scale in 1944) left nitrates in groundwater and streams and led often to dangerously high insecticide and herbicide residues in plant and animal tissues.

Environmental pollution, previously a matter of regional impact, started to affect more extensive areas around major cities and conurbations and downwind from concentrations of power plants as well as the waters of large lakes, long stretches of streams and coastlines, and many estuaries and bays. More sensitive analytical techniques were recording pollutants in the air, waters and biota thousands of kilometers from their sources.

Only a few remedies were introduced during the 1950's, most notably in combating air pollution. London's heavy air pollution, culminating in 4,000 premature deaths during the city's worst smog episode in December, 1952, led to the adoption of Bri-

tain's Clean Air Act, the foundation of the first comprehensive effort to clean a country's air.¹⁰ Throughout the rich world, electrostatic precipitators able to remove more than 98 percent of all fly ash were becoming a standard part of large combustion sources, and black particulate matter started to disappear from many cities and visibility improved; this trend was further aided by the introduction of natural gas in home heating.

ENVIRONMENTAL AWARENESS

The big attitudinal shift came in the 1960's. Rachel Carson's influential warning about the destructive consequences of pesticide residues in the environment was often described as the beginning of new environmental awareness, but the impulse came from many quarters.¹¹ Accumulating evidence of spreading air pollution was especially important in influencing public opinion: objectionable particulates were removed from the urban air, but invisible pollution began to affect areas far from the most prolific sources of combustion.

Europeans were the first to note this phenomenon. International monitoring networks established in 1948 and Swedish observations started in the early 1960's pointed to worrisome changes in the composition of the continent's precipitation. In 1967, Svante Odén described for the first time the dangers of acid deposition caused by the long-range transport of acid air pollutants followed by degradative changes in lakes and soils in sensitive receptor areas.¹²

The decade of the 1960's also brought many exaggerated claims. In the United States, perhaps the most famous scare was Barry Commoner's warning, first presented in 1968 and amplified in many later writings,¹³ about the serious imbalance of the country's nitrogen cycle. Commoner feared that the rapid introduction of inorganic nitrogen carriers such health risks that limits on fertilization rates economically devastating for many farmers, might soon be needed to avert further deterioration. Synthetic nitrogen in agroecosystems is a problem but a much more manageable one than was suggested by Commoner's misinterpretation of the existing evidence, which was clearly refuted by Samuel Aldrich.¹⁴

But there was no shortage of other targets. Once the interest in environmental degradation began, the Western media (ever watchful for bad news) and scientists (whose work is so often governed by fashionable topics) kept attention alive with a barrage of new worries. Soon the environmental concerns were adopted by such disparate groups as the leftist student protesters, who discovered yet another reason to tear down the ancien régime, and large oil companies, which discovered that fis-

⁸Raymond Flower and Michael Wynn Jones, *100 Years of Motoring* (Maidenhead: McGraw Hill, 1981).

⁹United Nations Organization, *Statistical Yearbook* (New York: UNO, 1948-).

¹⁰Samuel J. Williamson, *Fundamentals of Air Pollution* (Reading: Addison-Wesley Publishing, 1973).

¹¹Rachel L. Carson, *Silent Spring* (Boston: Houghton Mifflin, 1962).

¹²Swedish Ministry of Agriculture, *Acidification Today and Tomorrow* (Stockholm: Swedish Ministry of Agriculture, 1982).

¹³Barry Commoner, *The Closing Circle* (New York: Knopf, 1971).

¹⁴Samuel Aldrich, *Nitrogen* (Urbana-Champaign: University of Illinois, 1980).

thrive around the legs of offshore drilling platforms and advertised accordingly, with two-page glossy spreads.

The summer of 1970 marked the first attempt at a systematic evaluation of global environmental problems: the Study of Critical Environmental Problems sponsored by the Massachusetts Institute of Technology.¹⁵ The items were not ranked, but the order of their appearance in the summary indicated the relative importance perceived at that time. First came the emissions of carbon dioxide from fossil fuel combustion, then particulate matter in the atmosphere, cirrus clouds from jet aircraft, the effects of supersonic planes on stratospheric chemistry, the thermal pollution of waters and the impact of pesticides. Mercury and other toxic heavy metals, oil on the ocean and the nutrient enrichment of coastal waters closed the list.

Just a month later, President Richard Nixon sent Congress the first report of the President's Council on Environmental Quality, noting that this was the first time in history that a nation had taken comprehensive stock of the quality of its surroundings. Soon afterward his administration established the Environmental Protection Agency by pulling together segments of five departments and agencies; and the environment entered big politics. The same thing happened on the international level, where attention was focused on the first-ever United Nations-organized Conference on Human Environment in Stockholm in 1972. Swedes talked about acid rain, Brazilians insisted on their right to cut down all their tropical forests in their dash to development and the Maoist Chinese claimed to have no environmental problems at all.

The actions taken by OPEC (the Organization of Petroleum Exporting Countries) in 1973-1974, the global economic downturn, and misplaced but deeply felt worries about ruinous shortages of energy turned public attention away from the environment temporarily, but new studies, new revelations and new sensational reporting kept environmental awareness high. Notable 1970's concerns included the effects of nitrous oxide from intensifying fertilization on stratospheric ozone, the carcinogenic potential of nitrates in water and

vegetables, and both the short-term effects of routine low-level releases of radionuclides from operating nuclear power plants and the long-term consequences of high-level radioactive waste that had to be stored for millennia.

And with the economic plight of poor nations worsened by the higher prices of imported oil came the "discovery" of the continuing dependence of all rural and some urban Asian, African and Latin American populations on traditional biomass energies—wood, charcoal, crop residues, dried dung—and the realization of how environmentally ruinous such reliance can be in societies where recent advances in primary medical care have pushed the natural increase of population to rates as high as 4 percent a year.¹⁶

Massive deforestation and the ensuing desertification in dry subtropical countries and heavy soil erosion and intensified flooding in rainy environments have other causes as well: inappropriate methods of farming, predatory commercial logging, and often government-sponsored conversion of forests to pastures producing beef for export.

To this must be added the effects of largely uncontrolled urban and industrial wastes, including the release of toxic substances that would not be tolerated in rich countries, appalling housing and transportation conditions in urban areas, the misuse of agricultural chemicals and the continuing rapid losses of arable land to house large population increases and to accommodate new industries. Not surprisingly, when an ambitious American report to the President surveyed the state of the environment in 1980 it devoted much of its attention to the immense environmental burdens of the poor world.¹⁷

In human terms this degradation and pollution present an especially taxing challenge to China, the world's most populous country. When Chairman Deng Xiaoping's "learning from the facts" axiom replaced Chairman Mao Zedong's "better red than expert," the flood of stunning admissions and previously unavailable hard data provided a depressing comprehensive account of China's environmental mismanagement, whose single most shocking fact may be the loss of one-third of China's farmland within a single generation in a nation that must feed a little more than one-fifth of the world's population from one-fifteenth of the world's arable land.¹⁸

And the environmental problems of the poor world were even more prominent in another global stocktaking, in 1982, at the Conference on Environmental Research and Priorities organized by the Royal Swedish Academy of Sciences in Rättvik.¹⁹ The meeting's list of ten research priorities for the 1980's was headed by the depletion of tropical forests and the reduction of biological diversity,

¹⁵Study of Critical Environmental Problems, *Man's Impact on the Global Environment* (Cambridge: MIT Press, 1970).

¹⁶Erik P. Eckholm, *Losing Ground* (New York: W.W. Norton, 1976).

¹⁷Council on Environmental Quality and the United States Department of State, *The Global 2000 Report to the President* (Washington, D.C.: United States Government Printing Office: 1980).

¹⁸Vaclav Smil, *The Bad Earth: Environmental Degradation in China* (Armonk, N.Y.: M.E. Sharpe, 1983).

¹⁹Alf Johnels, "Conference on Environmental Research and Management Priorities," *Ambio*, vol. 12, no. 2 (1983).

while the list of management priorities included first of all hazardous chemicals, the depletion of tropical forests and desertification due to overgrazing.

The most recent environmental mishaps and worries have echoed and intensified several recurring concerns. Such accidents as the cyanide poisoning in Bhopal in 1984 and the news about the daunting efforts to clean up thousands of waste sites make hazardous toxic wastes a matter of lasting apprehension, and the Chernobyl disaster in 1986 strengthened the popular fear of nuclear power. At first, an almost unbelievable discovery of a seasonal ozone hole above Antarctica revived the worries about the rapid and intense human-induced change in the atmosphere,²⁰ a concern further intensified by a new wave of writings and reports on the imminent warming of the atmosphere because of the accumulation of "greenhouse" gases.²¹

THE ENVIRONMENTAL CHALLENGE

What then is the state of our environment, and what are our prospects? Simple questions may go to the heart of the matter—but simple answers would be highly misleading. Of course, this has not prevented many observers from providing precisely such simple answers during the last 20 years. On the one hand, the environmental catastrophists (a Western intellectual species descended from Robert Malthus) offer vivid descriptions of existing dangers and predict even greater imminent horrors. For some of these doomsayers the question has been not "how shall we live, but indeed if we are going to live at all for very much longer."²²

On the other hand, the techno-optimists (utopians?) argue that human inventiveness and management skills will soon take care of all environmental ills; they portray a less polluted and ecologically more stable future with less precarious life for a more populated world.

Julian Simon and Herman Kahn have been the most notorious wholesalers of this coming nirvana, seriously weakening their message of hope as an antidote to catastrophic moaning by advocating incredibly naive interpretations of existing realities and future possibilities.²³

²⁰Richard S. Stolarski, "The Antarctic Ozone Hole," *Scientific American*, vol. 259, no. 1 (1988).

²¹H.S. Johnston, "Human Effects on the Global Atmosphere," *Annual Review of Physical Chemistry*, vol. 35 (1984).

²²Thomas Harney and Robert Disch, *The Dying Generations* (New York: Dell Publishing, 1971).

²³Julian Simon and Herman Kahn, *The Resourceful Earth* (Oxford: Basil Blackwell, 1984).

²⁴Gordon Wolman, "Soil Erosion and Crop Productivity: A Worldwide Perspective," at Soil Erosion and Crop Productivity Symposium, March 1-3, 1983, Denver.

²⁵The World Bank, *World Development Report 1988* (New York: Oxford University Press, 1988).

These verbal forays from the mentally antipodal, well-fortified camps of true believers change nothing. Allegiance to one of these groups may confer a feeling of intellectual superiority and righteousness, but a sensible appraisal of the state of the global environment must eschew sloganeering simplifications. There are many environments, many scales, many threats, and many solutions.

Atmosphere, land, waters, and biota form an exquisitely interconnected co-evolutionary system, but the term "global" obviously has another meaning besides its use in the currently fashionable appraisals of climatic changes affecting the whole biosphere. Such changes are seen as inherently more dangerous than local or regional degradations. But "global" can also simply describe the extent of myriad of local occurrences; in this sense soil erosion, rather than climatic changes, must rank as the world's leading global environmental worry.

Climatic change will create losers—but there will also be winners, with milder winters, or higher precipitation, or longer growing seasons. Soil erosion leaves no winners—and the rates of loss are as bad in one-fifth of America's farmlands as they are in the fields of South China or West Africa.²⁴ But soil erosion is a rather unexciting topic; to an outsider it represents an invisible creep of gradual losses. As such, it cannot garner headlines equal to the sensationalized stories of climatic change, which see every warmer summer as the beginning of the slide toward an uninhabitable planet.

Looking at the global environment from what might be labeled the receiving end is also instructive, because it involves an often overlooked bottom line: people live longer everywhere. Western life expectancies are uniformly over 70 years; the Chinese have pushed their life expectancy to 70; Indians to nearly 60.²⁵ The cumulative effects of lifetime exposure to a huge array of air and water pollutants, to pesticide residues in food, to higher absorbed radiation and to greater urban noise have not been deleterious enough to stop a steady rise in life expectancy.

This does not mean that overall degradation is at a tolerably low level because there are areas and population groups at much higher risk than can be indicated by national averages. Many shrill claims that the planet has been turned into an intolerable

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In discussing manufacturing and services in America's post-industrial economy, our author observes that "5 million new manufacturing jobs [will be needed] in the next few years to balance the United States balance of payments. . . . Manufacturing employment is apt to be growing very rapidly in the next decade . . . [while] service employment is apt to shrink."

American Mirage: A Post-Industrial Economy?

BY LESTER C. THUROW

Professor of Economics and Management, Massachusetts Institute of Technology

TODAY the United States economy is probably at a fundamental turning point. For the past 40 years, service employment has supplied the bulk of the new jobs in America; for the past 10 years it has supplied almost all of them. In the decade ahead, this pattern may well be reversed. Service employment is apt to fall as a fraction of total employment, and manufacturing employment is apt to grow as a fraction of total employment.

At the same time, service wages will probably rise relative to manufacturing wages. If foreign experience is any guide, higher wages will force the service industries to invest more in capital equipment. This equipment and the new technologies that it embodies will start trigger an increase in service productivity.

In 1987, the United States ran a \$171-billion trade deficit. This translates into more than 4 million full-time full-year manufacturing jobs. In addition, at the end of 1988 the international debts of the United States were approaching \$500 billion. This translates into another \$40 billion in additional exports or fewer imports (about 1 million more manufacturing jobs) necessary to pay interest on that accumulated debt. The bottom line is the need to add 5 million new manufacturing jobs in the next few years to balance the United States balance of payments. These are jobs over and above those that will be added by general economic growth.

These jobs have to come in manufacturing since they can come in nothing else. Because of the green revolution, foreign markets for American agricultural goods have simply vanished. As a result, the American trade deficit cannot be solved with agricultural exports.

If one looks at employment statistics alone, the United States is well into the post-industrial era. Ninety-eight percent of American jobs generated over the past ten years have been service jobs.

Noting the dominance of services in employment growth, however, reveals less than it seems to reveal. Services are not a conventional industry producing similar products or using similar technol-

ogies. Statistically, they are what one might call a "negative" industry. They include everything that is not agriculture, mining, construction or manufacturing.

To look at services is to look at heterogeneity, but to look at the growth in service employment is also to look at the past. Service employment has almost peaked as a percent of total employment and is about to start declining.

SERVICE EMPLOYMENT GROWTH

In the period from 1979 to 1985 most of the growth in service employment (91 percent) could be traced to the growth of three industries — producers services (45 percent), retail trade (29 percent) and health care (17 percent). To understand the growth in service employment, it is necessary to examine these three industries closely.

While these three sectors produce very different services, they all have a common characteristic that is the mirror image of their rapid employment growth — falling productivity. Over the past 20 years, productivity has fallen at the rate of 1 percent per year in retail trade and 0.8 percent per year in health care. Employment has to rise rapidly to accommodate both the growth in demand and the declining efficiency with which each of these services is being delivered.

Two questions become central. Why is demand rapidly rising in these three areas? Why is productivity slowly falling?

The demand questions are easily answered. Health care demand is up because of the interactions among an aging population, the development of expensive new technologies to treat the ailments of old age, and the expansion of health insurance coverage for the elderly. Together, measured as a fraction of the gross national product they have produced a doubling of national expenditures on health care in the past two decades.

In retail trade, the growth in the restaurant business is directly traceable to working women. As hours of work rise, fewer and fewer meals are cooked at home. This in turn requires an expansion

of the restaurant business. The rest of the growth of employment in retail trade is traceable to the gradual movement toward 24 hours per day, 7 days per week shopping—a form of convenience shopping that requires more sales personnel per dollar of sales.

Producers services can be broken down into four roughly equal parts—financial services, commercial real estate, professional services and labor subcontracting.

The growth in financial services is easily explained by the telecommunication-computer revolution and the abolition of government capital controls. Together they have produced a world capital market with all of its opportunities for new activities such as Euro-currency purchases or sales. In addition, with volatile interest rates and currency values, arbitrage and hedging activities (currency swaps, interest rate hedges, forward currency sales) that used to be rare have become common.

The growth in office space has led to a rapidly growing commercial real estate sector—mostly building services. Building custodians, for example, represent the service occupation with the largest absolute increase in size over the past decade.

An increase in office space is easily explained by the rapid growth in white collar employment. Thirteen million new white collar employees have been added to the economy in the past decade and all of them have to have a place to sit. Here again, however, employment growth is the mirror image of falling productivity. From 1978 to 1986, white collar productivity fell 5 percent.

Technology has added another major outside supplier, computer software firms, to the traditional law, accounting, and management consulting firms that have long been providing producer services, but law firms have also been growing very rapidly.

Finally, temporary help agencies or protective service agencies, where employees actually work on the physical premises of businesses in other sectors but are counted as service employees have grown very rapidly. In both cases, the activity is growing rapidly because indirect employment offers lower cost workers than could be hired if firms were to employ these workers directly themselves.

FALLING PRODUCTIVITY

While the rapid growth in demand can easily be explained, the slow declines in productivity cannot. The simplest explanation for declining productivity is that service output is in some unspecified way not being properly measured and that therefore falling productivity is a statistical artifact produced by faulty measurements. But no one who has seriously examined this possibility has been able to show ex-

actly how output is being systematically underestimated. And looking abroad it becomes impossible to verify this argument. Service output is measured in the same way in all of the industrial world, yet service productivity is growing in most other countries. If the problem were to be found in faulty measurements, the problem would exist everywhere, but it doesn't.

If American service productivity had grown at a rate similar to that of West Germany's, for example, instead of producing 18.7 million service jobs between 1971 and 1983 the United States would have produced only 3.6 million jobs. This enormous difference can be traced to a number of factors. Foremost, capital per worker in the service industries has been growing twice as fast in Japan or West Germany as it has been in the United States. As a result, service industries have been able to employ more capital-intensive technologies abroad. In Sweden, for example, the parking lot attendant has been replaced by plastic cards. With automatic ticket selling machines, automatic ticket checking and unattended lift loadings, Swiss ski resorts use many fewer workers than the equivalent American resorts. Unattended machines sell gasoline at night in Italy.

Foreign willingness to invest in more capital-intensive technologies can be traced to a number of factors. Relative to the cost of capital, wages have gone up less in the United States than abroad. While the cost of labor relative to capital went up from 100 to 144 in the United States between 1964 to 1982, the relative cost of labor rose from 100 to 206 in West Germany and from 100 to 204 in Japan. With a much more rapid rise in wages, foreign firms had greater incentives to replace labor with capital.

This incentive to move toward more capital-intensive forms of production was magnified by the fact that service wages are much higher relative to manufacturing wages abroad than they are in the United States. Whereas private service workers in the United States are paid only 67 percent as much as those in manufacturing, in Japan they are paid 93 percent as much and in West Germany 85 percent as much. With lower wages in services, American firms have had less need to use more capital than their foreign counterparts, who were forced to pay higher wages.

If one asks why service wages are higher abroad,

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In this article, our author discusses the growing influence of the multinational trading blocs in North America, West Europe and East Asia — what he calls “superblocs” — on global economics and United States foreign policy. “The evolution of regional superblocs . . . has the potential to divide the Western alliance.”

Trading Blocs and the Evolving World Economy

BY JEFFREY E. GARTEN

President, Eliot Group, Inc.

IN the late twentieth century, there is a strong tendency for three major parts of the world to form regional economic blocs — superblocs.* There is one forming in West Europe, one in North America (including Mexico and the Caribbean), and one in East Asia. This tendency may well create centrifugal forces in the Western alliance (the United States, West Europe, and Japan) and may cause serious problems for American influence and interests around the world...

West Europe provides the clearest case of a group of sovereign nations moving deliberately to form a closer union. This is not a new development. Thirty years ago, the Treaty of Rome established the European Common Market. Since then, West European nations have cooperated extensively in many areas, including agriculture, steel and exchange rates. But something far more ambitious is happening: a quantum leap in economic integration. There is no fuzzy futuristic deadline: the goal is a single European market in 1992, and on many different levels, both official and private, there is an expectation — and a policy calculation on the part of businesses and governments — that the deadline will be met.

In the last years of the twentieth century, the remaining trade barriers among the members of the European Community may be eliminated, leading to freedom of capital movements and easier mobility of labor. West German banks should be able to service the everyday needs of Belgians; engineers from the Netherlands should be automatically licensed in Italy; construction crews from Great Britain ought to be able to work on French projects outside Paris.

West European companies are restructuring themselves furiously to take advantage of a new enlarged market; insurance companies, banks, food conglomerates and other industries are all merging. Currency coordination is getting tighter. There is increasing talk of some type of European Central Bank. The European Currency Unit (ECU) — the

currency cocktail that is part German mark, part French franc, part Italian lira, and so on — is being used more widely.

The second superbloc is forming in North America including Canada, the United States, Mexico and the Caribbean Basin (e.g., Central America and the islands). Close economic relations between the United States and the Basin did not begin yesterday, but the momentum for broader and deeper integration is growing rapidly.

In the early 1980's, Washington designed and supported a “Caribbean Basin Initiative” that provided unprecedented trade and investment concessions to Central America and the Caribbean islands. The impact was to link these nations with the United States by giving them greater access to United States markets and by providing American investors with new incentives. It was an innovative plan. No American initiative had ever combined so integrally trade and investment incentives. And none in recent memory had so blatantly excluded West Europe and Japan.

The United States-Canadian free trade agreement would result in major reductions in trade barriers and accelerate the integration of Canadian and American industries — from banking to energy to transportation. The treaty would be the first to guarantee that Canadian companies will be treated exactly like American companies in the event of new United States trade barriers, American retaliation against foreign companies, new restrictions on foreign investment, embargoes, and so on. It would intertwine the two countries at every level in an irrevocable way.

And within the last year, low-key discussions have begun between Washington and Mexico City about a more formal framework for United States-Mexican relations. Any new President will probably find ways to further ties to get a stronger handle on the related problems of trade, debt, immigration, energy and drug traffic. The large loan made by Washington in October — some \$3.5 billion — to Mexico was a clear sign of vital American interests in Mexico.

*This article is based on remarks made by the author at the Carnegie Council in New York on November 1, 1988.

The third superbloc is forming across the Pacific in East Asia. From Melbourne to Seoul, intraregional trade and investment are expanding. There is rapid growth in virtually every country on the Pacific Rim, but the dynamo that is propelling economic integration is Japan. The instrument is the strong yen. Again, this development may seem familiar but few would have predicted the strength and depth of the new Japanese economic empire a few years ago.

The real turning point came in 1985 when the yen started to soar. Japan's economic and business establishment recognized that a major restructuring of the Japanese economy and a reordering of economic strategy in Asia would be required. The strong yen began to draw in relatively cheaper imports from Hong Kong, South Korea, and Thailand. It also encouraged a massive wave of new Japanese investment in East Asia, where labor and materials were cheaper. From there it was a short step to a division of labor in which labor-intensive manufacturing moved from Japan to neighboring countries, and more technologically driven industry stayed near Tokyo and Osaka to be used locally and for export. This transformation is not complete, of course, but it is being orchestrated by Tokyo.

Regardless of the stage of development of the superblocs, fundamental forces pushing for regional consolidation are clear. Recent trends show that both economics and technology are leading to closer ties across adjacent borders:

- Intra-European trade now dwarfs trans-Atlantic trade.
- Studies predict that within ten years in East Asia, North-South trade will be larger than trans-Pacific commerce.
- Long before the United States-Canadian free trade agreement was written, the cat was out of the bag: today one-third of all United States investment abroad is in Canada; the United States trades more with the province of Ontario than with Japan; much of New York's skyline is owned by Olympia and York.

There are also political and psychological reasons for the emergence of superblocs:

- West Europeans are cooperating more closely because they believe this is the only way to compete with the United States and Japan in the race for commercial technology.
- Both West Europe and Japan are worried about American policy that may become protectionist and formulated with less and less regard for international rules or the impact on other nations. Their best hedge is to ensure that they have their backyards secured.
- Both West Europe and Japan have grown economically more powerful in the last quarter of a

century, and this is being reflected in a desire to act more independently, a great temptation, particularly when United States leadership is not inspired.

- And in the United States, despite a lot of bravado talk, there is a mood to lessen the burdens of international leadership, to ask others to accept more responsibility for military security, foreign aid, and support for international organizations. It is only a short step from this attitude to isolationism.

The three superblocs are not airtight. There is much evidence of global interdependence; international trade of all types continues to grow. Big multinationals are roaming every corner of the globe. Mergers between Bridgestone and Firestone or between Credit Suisse and First Boston are occurring with increasing frequency. Hughes Aircraft builds satellites for Australia to mount on Chinese rockets and there are many more examples of the spaghetti-like structure of the world economy.

But there are other equally powerful and fundamental forces. Interdependence within regions will grow faster. And although American firms may operate in West Europe, there is no evidence that they will serve United States interests more than those of the host country; in fact, for practical purposes, they may well be card-carrying members of the European bloc. Governments can still set the tone for future trade and investment patterns and, economic interdependence notwithstanding, a political bloc mentality may still take a toll.

WHY CARE?

There are several causes for concern because of the growth of the regional superblocs. A world of superblocs could be increasingly mercantilistic and protectionist. In West Europe, for example, Americans should worry about the way economic consolidation is achieved and try to make sure that it is not achieved at the expense of foreign investment or exports to West Europe. Already West European officials are using code words to put Americans on notice that their own industries may have to be given preference over foreigners in their evolving market. When these officials use such euphemisms as "transitional arrangements," "nurturing industries" or "reciprocity," for example, Americans ought to pay close attention.

(Continued on page 54)

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"Population growth will remain a major challenge to successful development in the decades to come and . . . will exert an increasingly important influence on international relations."

World Population Trends

BY PAUL DEMENY

Distinguished Scholar, The Population Council

HUMAN populations, like all living species, are endowed with a reproductive potential that, if unchecked, would allow them to replenish the earth in a quite literal sense within a few dozen generations. Save for exceptional and short periods, nature and (for humans especially) social organization control that potential.

For human populations, the industrial revolution heralded the arrival of such exceptional times. The growth spurt it generated in human numbers came to its climax in the third quarter of the twentieth century. It is now abating, but population growth has a powerful built-in momentum that virtually assures major increases in population size in many countries—countries that contain the large majority of the world's people. The pattern and the modes through which population growth in these countries will be brought back to the historically dominant, (and in the long run ecologically mandatory) near-stationary levels remain uncertain. The speed at which countries converge toward and eventually attain zero population growth will have a powerful impact on human prospects in the next century.

In 1988, the world's population is estimated at 5.1 billion, slightly more than twice its 1950 size, 2.5 billion. On the global level, doubling in such a short period of time was a unique event in human history: such an explosive population increase has not happened before and will not happen again.

The spectacular and necessarily temporary acceleration of the rate of population growth that

caused the increase began shortly after the close of World War II. In retrospect, the course of the population growth curve can be accurately traced. Its all-time high—at the annual rate of 2.1 percent—occurred in the late 1960's: growth rates have continued on a slowly decreasing path ever since.¹ The global rate of increase in the late 1980's is estimated at 1.7 percent. Measured in terms of absolute numbers, however, growth is still accelerating. The peak growth rate between 1965 and 1970 generated annual additions to the world's population of 72 million. In the late 1980's, the estimated global population increase amounts to 88 million each year.

Demographers failed to anticipate this extraordinary post-1950 demographic growth spurt, nor were they quick to perceive its onset. To be sure, they knew that by historical standards global population growth was already rapid before mid-century.² The average annual growth rate in the nineteenth century was slightly above one-half of one percent: it brought the world's population from an estimated 950 million in 1800 to somewhat above 1.6 billion in 1900. The average growth rate in the first half of the present century was still higher: only slightly below nine-tenths of one percent. But, from that already rapid tempo of increase, the jump to a 2 percent or higher rate of annual growth was nearly discontinuous and caught all experts unprepared.

Thus, in 1945, Frank Notestein, then the most eminent figure among American demographers, foresaw a year 2000 population of some 3 billion.³ In retrospect we know that that figure was surpassed as early as 1960. In 1954, at the Rome World Population Conference, the first major international scientific meeting in demography in the post-World War II period, E.F. Schumacher (later the author of *Small is Beautiful*) posited a 1980 global population of 3 billion.⁴ The projection ventured only a quarter century forward, yet it turned out to be in error by an amount roughly equivalent to the total world population at the beginning of the twentieth century. Some 10 years later, in 1965, at the next World Population Conference, held in Belgrade, the prominent Soviet demographer, A.Y.

¹Unless otherwise noted, population figures cited in this discussion draw on the latest estimates and projections prepared by the United Nations. See Population Division, Department of International and Social Affairs of the United Nations, *World Population Prospects: 1988* (New York: United Nations, 1988).

²For historical estimates of population change see Colin McEvedy and Richard Jones, *Atlas of World Population History* (New York: Viking Penguin Inc., 1978). For a brief review of growth in the modern period, see Paul Demeny, "The World Demographic Situation," in Jane Menken, ed., *World Population and U.S. Policy* (New York: W. W. Norton, 1986).

³Frank W. Notestein, "Population—The Long View," in Theodore W. Schultz, ed., *Food for the World* (Chicago: University of Chicago Press, 1959).

⁴E. F. Schumacher, "Population in Relation to the Development of Energy from Coal," in *Proceedings of the World Population Conference, 1954*, vol. 5 (New York: United Nations, 1955).

Boyarsky, was more cautious. He offered his year 2000 forecast defined by a range: somewhere between 4.2 billion and 5 billion.⁵ But this generous spread failed to guard against error. The actual size of the world's population surpassed the lower-end figure by 1977; the upper-end estimate was surpassed just 10 years later.

Such failures of global foresight (of which many more could be cited) reflect the accumulation of errors, pointing in the same direction, in estimating country population trends. Global (and regional) population estimates are obtained simply by adding up country level estimates. At least until the late 1950's, demographers' assessments of population growth prospects displayed a consistently conservative bias, particularly with regard to the so-called developing countries.

Mid-century estimates made for the world's two demographic giants, India and China, illustrate this tendency. For example, in his encyclopedic and authoritative study of the Indian subcontinent, Kingsley Davis fitted a "logistic" curve to adjusted census data for India's prepartition territory up to 1941.⁶ The logistic curve is a felicitous characterization of the long-run growth experience of biological aggregates that encounter increasing resistance from the environment as their size increases. An initial phase of expansion during which growth accelerates is followed by a decelerating growth phase and eventual stabilization as the aggregate reaches an upper limit reflecting ultimate environmental constraints. Applying this construct to India, Davis found it satisfactory to posit 700 million as the upper asymptote to the logistic curve. In fact, by 1988 the population of the Indian subcontinent exceeded this limit by some 350 million.

In similar fashion, around 1950, demographers professed to perceive a huge potential for demographic growth in China. But the quantitative estimate of that potential reflected a deep pessimism concerning the severity of the environmental constraints thought to limit China's population growth. Specific estimates of demographic growth projected to be experienced in that country between 1950 and 1980 ranged from 65 million to 140 million. The actual increase was about 440 million.

On their face, these examples of past demographic prognostication do not bode well for success in discerning future population trends. Indeed, it has been persuasively argued that population forecasts

beyond some 20 years into the future rapidly lose reliability.⁷ But, in fact, as the 1950's unfolded, the excessive conservatism that characterized demographic forecasts became gradually apparent to demographers, and the accuracy of the projected population figures increased markedly.

Part of the credit for the improved grasp of the shape of future population trends was due to notable, if still far from satisfactory, progress in gathering empirical data on demographic phenomena during the last few decades. Analytical tools have also sharpened.

THE DEMOGRAPHIC TRANSITION

The central paradigm devised by demographers for understanding the unprecedented growth of populations in the twentieth century, and indeed throughout the modern era, is that of the demographic transition: a more or less protracted historical process during which a population moves from an initial premodern stage characterized by high mortality and matching high fertility to an ultimate equilibrium of fertility and mortality at a low level.

When mortality is high—or, what amounts to the same thing, when expectation of life at birth is low—sustaining a population even at near-zero growth requires customs and institutions that maintain fertility at a high level. The very success in that endeavor suggests that the supporting institutions tend to be well-entrenched and resistant to change. This is not so with respect to mortality. Unlike low fertility—that is to say, a smaller family size—survival and a healthier life are universal desiderata. If technological and medical advances permit reduction of the death rate, the opportunity to take advantage of such advances will be eagerly sought.

As the complex of changes that are loosely described as "modernization" gathers force, this lack of symmetry between the behavioral underpinnings of mortality and fertility becomes a powerful generator of demographic growth. Under the impact of modernization, death rates tend to fall first, to be followed later by a decline in birthrates. Thus, with the onset of the demographic transition a gap opens up between birthrates and death rates, resulting in what demographers call "natural" increase. (The increase is called "natural" in order to distinguish it from increase *tout court*, which, in a population open to in- or out-migration, is also affected by the net migratory balance. Historically, migration as a source of growth has often been important. But in most contemporary populations, especially those of large countries, its impact on population growth tends to be relatively minor. In the global population, the net migratory balance is always zero.)

As long as people remain mortal, however, death rates cannot fall forever: they must eventually level

⁵A.Y. Boyarsky, "A Contribution to the Problem of the World Population in the Year 2000," in *World Population Conference, 1965*, vol. 2 (New York: United Nations, 1967).

⁶Kingsley Davis, *The Population of India and Pakistan* (Princeton: Princeton University Press, 1951).

⁷See especially Nathan Keyfitz, "The Limits of Population Forecasting," *Population and Development Review*, vol. 7, no. 4 (1981).

off. When falling birthrates catch up with the already low death rates, population growth once again halts: the demographic transition is completed.

This stylized picture of the transition is, of course, consistent with a great variety of patterns of demographic change experienced by individual countries. The secular decline of mortality started early and proceeded at a steady and slow pace among those in the vanguard of industrialization. When fertility decline ensued, its tempo was typically more brisk. The pioneer countries also had pretransition social systems that, by limiting marriage, kept fertility and the level of mortality relatively low. (Indeed, these demographic characteristics reflect, and partly explain, the factors that set the pioneer countries on the road to the industrial revolution.) Thus the potential for growth in early demographic transitions was relatively limited: in nineteenth century Europe the gap between birthrates and death rates rarely generated a growth rate appreciably above one percent.

This historical record colored demographers' views on the effects of the demographic transitions that gathered momentum in the early post-World War II period in Asia, Latin America and Africa. In fact, the actual patterns of transition experienced by these countries differed in crucial respects from those traced by the demographic pioneers.

First, the initial levels of both mortality and fertility rates turned out to be appreciably higher than were the corresponding rates in the "pioneer" countries. The growth potential that declining mortality could trigger was, accordingly, more powerful than was the case in earlier demographic transitions.

Second, the driving force of the demographic transition, mortality decline, turned out to be more precipitous than would have been expected from earlier transition experience. The application of advances in the medical technology developed in the industrialized countries played a crucial role in making such rapid declines in mortality possible. Medical technology did not render the level of development irrelevant as a determinant of mortality, but it shifted the relationship between development and mortality: in the less developed world, in the second half of this century, given levels of income are associated with much lower levels of mortality than were observed in early transitions.

Third, in countries of Asia and Latin America where fertility did begin to decline, the tempo of that decline has generally been appreciably faster than was the case in earlier experience. A speeding up of fertility transitions had already been observed in the first half of the twentieth century; it was reasonable to expect that fertility declines in the late-comer countries would occur at an increasingly

rapid pace. Deliberate policies that many developing countries adopted beginning in the 1960's—policies aimed at triggering and facilitating fertility declines—appear, to have played an important part in fostering the spread of birth control, hence speeding the transition toward lower fertility.

Finally, in many instances, the high rates of population growth generated by the demographic transition in its middle phase affected countries that had already attained a very large size—like China, India and Indonesia. Accordingly, measured in terms of absolute increases, the impact of the transition process was very severe, often without historical precedent.

As a result, the demographic makeup of the world underwent a dramatic change during the course of one-third of a century. A concise quantitative picture of the massive demographic shifts that occurred between 1950 and 1985 is presented in the first two columns of Table 1 (see inside back cover), and in the columns that indicate the growth rates and population increases during that period.

The regional units shown in Table 1 are divided into two broad groups, labeled "North" and "South." For all practical purposes, this classification is the same as the familiar if plainly tenuous division of the world into "developed" and "developing" nations. However, "North" and "South" are also less than fully accurate labels.

The striking demographic contrast between these two broad regions is highlighted by the difference in growth rates: between 1950 and 1985, the poor "South" grew more than twice as fast as the rich "North." This gap is especially remarkable in view of the fact that the period also witnessed a strong resurgence of demographic growth in the "North," caused by the unexpected baby boom of the 1950's and 1960's. But the major demographic event of those decades was not rising fertility but the precipitous fall of mortality in virtually all countries of Asia, Latin America and Africa. Falling death rates combined with still high birthrates produced the extraordinary expansion of the population of these continents. Between 1950 and 1985, the net addition to human numbers in the "South" was some 2 billion, equivalent to the total world population around 1930, and nearly 2.5 times as large as the total population of the "North" at mid-century.

These unequal patterns of demographic growth induced marked shifts in the regional composition of the world's population. Table 2 (see inside back

(Continued on page 58)

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The second section of this issue features edited selections from 75 years of Current History.

SECTION II: A RETROSPECTIVE

In the January, 1924, issue of Current History, Ray Stannard Baker talked about traditional American isolationism, President Woodrow Wilson's leadership after 1917, the United States failure in the League of Nations, and the greed and haste that led to the Versailles Treaty.

—JANUARY, 1924

The Versailles Treaty and After

BY RAY STANNARD BAKER

Author, *What Wilson Did At Paris*

AT the opening of the World War [1914] the United States was in a paradoxical state of mind as regards her international relationships.* Traditionally and sentimentally she was an isolated nation with little or no concern regarding European affairs. Touch the ordinary American on his international nerve and he would murmur automatically: "Avoid entangling alliances."

But if our traditional dogmas of isolation still dominated our thoughts, we were, in reality, becoming practically involved in world affairs on every side. Since the Spanish War of 1898 we had been truly a world power, though we had not fully realized the implications of that great fact. It was as true of America as of Great Britain that the sun never set upon our possessions. We were committed half around the world in the Philippine Islands; we occupied the strategic center of the Pacific at Hawaii; we had built and owned the Panama Canal, and we were gradually extending our control over the Caribbean Sea. Our interest in Latin America, theoretically established a century before by the Monroe Doctrine, had become so intensely practical in Mexico that it was near actual war.

Our trade, furthermore, had become, almost by magic, worldwide. The tin cans used by the Standard Oil Company were familiar utensils in China, Arabia and the heart of Africa. Half the women of the civilized world used American sewing machines. Our manufacturers of steel, cotton and machinery were invading all the countries of the earth and there coming into bitter competition with the British, the Germans, the French and the Japanese. More of our money was being invested in Russia, China and Latin America than ever before.

To say that we had no interest in world affairs, that we were isolated and aloof, was as absurd in 1914 as it is today [1924].

While we were walking with our heads in a kind of cloud of traditional and sentimental isolation, our feet were taking us practically into every kind of bewildering international complication.

This double-mindedness of American opinion expressed itself vividly in the first two years of the World War. President Wilson's program, from first to last, when reduced to its essential elements, was one of peace. Any study of his messages, speeches and letters will show that, above everything else in the turmoil. President Wilson was thinking and working for a single goal—trying to discover the best way to use the mighty power and prestige of America to bring the blessings of peace—permanent peace—to the world.

EARLIER EFFORTS FOR PEACE

In the beginning, like most Americans and many Europeans, Mr. Wilson thought that a negotiated peace was not only possible but desirable. He feared an overwhelming victory for either side, for he knew the possibilities of a peace dictated by a group of triumphant and greedy nations seeking not only to crush the enemy but to expand their own interests and power. We knew well at the time what Germany wanted and proposed to do with a victory. It exhibited its spirit vividly at the conference with the Russians at Brest-Litovsk [1918]; we know better since then what the Allies, with their secret treaties, purposed to do if they were victors. There is nothing more disillusioning in the whole history of the war than a close study of these slimy secret treaties concluded among the Allies in 1915, 1916 and 1917. It was plain that an imposed peace by either side would be a merciless business. Realizing this, President Wilson, though bitterly criticized by many

*The original text of the Versailles Treaty, which was wired to the offices of *Current History* as it was distributed at the peace conference, can be found in our August, 1919, issue, pp. 285-368.

good men, tried to get an honest and open statement from both sides as to their war aims. In this endeavor he used a phrase on January 2, 1917—used it with deliberation—which awakened a storm of controversy in the world—"peace without victory."

We can look back now, after seven bloody years of turmoil and suffering, to these prophetic words and see what peace *with* victory, even when mitigated by an American presence at the Peace Conference, can mean in the world. But we all remember what happened, and how, little by little, we were drawn irresistibly into the conflict, as we shall be drawn again and again into future wars unless there is some other common-sense method of settling the issues involved.

It became more evident every moment that the war would have to be fought to a finish; that there would have to be what [David] Lloyd George called a "knockout" blow. In spite of the dangers which the President so plainly saw, there would have to be a victor's peace.

President Wilson accepted the new situation as a reality, and began at once to devise a new method, the foundations of which he had already laid, to meet it. Though he was now committed to the war, his supreme interest and concern were still peace. How, out of this terrible conflict, might a truly just and permanent peace be secured?

His program was both clear and simple—it rested on historic American principles; and it convinced the world because it set forth plainly what men, in their innermost souls, knew to be true. Every one remembers the building of that edifice of statecraft, the various addresses, the "points," the acceptance by nation after nation of the American program, and at length the finale that led up to the armistice. In one year's time the President had lifted the whole world to a new plane of conscience and of action.

The statesmen of the allied nations, recognizing the power of this wave of idealism, seized upon it eagerly as a means of unification and remoralization, and great American agencies of publicity helped to popularize and legendize it. If the President's program invigorated the Allies and filled them with new hope, it also served to disintegrate the unity of the Central Powers and encourage among them the party of peace.

A SIMPLE PROGRAM

The American program in its essence was extremely simple, and not in any way new. It was really the application of two well-tested American principles to world affairs.

The first of these principles concerned the rights and liberties of men to govern themselves. It was the democratic idea of government by "consent of

the governed." It traced its origin back to the American Declaration of Independence. In its world application it was called the "right of self-determination" of peoples. This was one of the slogans of the peace.

The other principle concerned the obligations and controls of human kind: the obligation to cooperate with other people. It traced back to our Constitution, with its principles of federalism among States. In its world application it developed the idea of a League of Nations. This was the other slogan of the peace.

Of course there arose bitter, one-sided men who could see only the difficulties and dangers involved in the President's principle of "self-determination" and who attacked on this ground; others, equally one-sided and bitter, could see only the difficulties involved in a League of Nations, and attacked him on that score.

President Wilson, however, never at any time thought of these principles as separate; both in speech and action he always linked them together.

The vision President Wilson had was a world away from the German idea of a State seeking by force only its own safety and its own welfare; and equally a world away from the idea of those United States Senators whose principle was the absolute selfish interest of America, and who were against accepting any obligation or responsibility for the good of the world.

THE TRAGEDY OF PARIS

We may now come to the tragedy of Paris: the old, old tragedy of the attempt to apply noble, reasonable and truly practical principles to sordid and bitterly controversial conditions; to ask leaders, drunk with victory and greedy with the sense of unlimited power that goes with victory, to be faithful to principles in which they never had any vital belief and which conflicted with their own immediate national interest.

No sooner had the war ended than the high emotional and moral enthusiasm which marked its concluding year began to fade away. The spirit of unity began to disintegrate. The Allies had not, after all, common purposes. Each had its ancient loyalties, necessities, jealousies, ambitions, and these immediately began to reassert themselves. The purposes of the secret treaties were again crowded into the foreground. No miracle had really occurred. Men found themselves back in the old familiar world, and more than that, in a state of exhaustion and demoralization which tended to irritate rather than calm the natural differences of opinion. There had been a world slump of idealism, and it must never be forgotten, in judging these events, that it was in this time of national shell-shock that the

treaties were made.

Within six weeks after the war closed, and while President Wilson was in England making his great speeches at Manchester and elsewhere, in which he set forth with new power his program for the peace and the League of Nations, [Georges] Clemenceau was telling the Chamber of Deputies at Paris that he still believed in the old-fashioned system of alliances. Although both he and Lloyd George had accepted fully the President's basis of settlement, viz., the Fourteen Points, Lloyd George was now for making Germany pay to the "last shilling," and notable French and Italian leaders were advancing territorial and other claims which, if granted, would defeat the very principles to which the Allies had agreed at the armistice.

In America there was exactly the same reaction, though by no means as severe. Politics again came uppermost and backfires of criticism of Wilson and his policies everywhere began to set. While the President was saying in Europe that the United States wanted nothing for herself, that "we have no selfish ends to serve," Senator [Henry Cabot] Lodge was declaring before the Senate (in his speech of Dec. 21) that there must be heavy indemnities paid by Germany (although the agreement in the armistice was that only reparations, not indemnities, were to be paid), and that "in these indemnities the United States must have its proper and proportional share." While the President, moreover, was voicing strongly his vision of the American Nation serving the world and taking its part in a league of nations, Senator [Hiram] Johnson was asking Americans to take counsel of their fears, preserve their isolation and leave the nations of Europe to their own devices. It was thus that Wilson's idea of "Humanity First," this vision of America as a great servant of the world, began to be superseded by the new slogan, "America First!"

President Wilson himself clearly perceived the difficulties which would confront him at Paris. He knew but too well the problems of the torn and bleeding world, the hatred, the bitterness, the greed, that had come up out of the World War. He knew that the whole world was turning in distress to America. America was to be the savior! America was to perform miracles! Walking the broad decks of the *George Washington* one night on the trip to Europe, looking off over the wintry ocean, he remarked sadly to a friend: "What I seem to see — with all my heart I hope that I am wrong — is a tragedy of disappointment."

So the historic struggle at Paris began. It appears, at first sight, complicated and difficult to understand; but, as a matter of fact, in its main issues and conclusions it was exceedingly simple.

If the United States, represented by President Wilson, had not been at the council table, the con-

ference would have settled down quickly to the methods of the old secret bargaining diplomacy: the nations would have conducted the conference as the French suggested before the war was fairly ended — upon the precedents of the Congresses of Vienna of 1815, Paris of 1856, and Berlin of 1878. Each nation had already agreed, in secret treaties concluded earlier in the war, on what it was to have. The victory over the Central Empires was complete, and the business of dividing the rich spoils of the war and of punishing Germany would have been swiftly accomplished. But America was there; Wilson was there, with many new ideas of a peace of justice and of a method to prevent wars from arising in the future. These ideas, moreover, had been agreed to at the armistice, and this was disconcerting to the European powers.

There were three acts with appropriate settings in this drama. The first represented the old diplomacy; it was laid in the ancient and solemn French Foreign Office on the Quai d'Orsay. Here, behind double doors and soundproof walls, were held all the earlier meetings of the conference — the Council of Ten, the Council of Five. Here were exhibited, especially at those plenary sessions which were designed to impress the public of the world without really informing it, all the trappings and ceremonials of the old diplomacy; here were floods of decorative talk that meant little or nothing; here in the smaller sessions were assumptions of mystery and secrecy, while all the essential facts were leaking out through every crack and cranny. It was in this atmosphere, foul with intrigue, that a large part of the territorial, economic and military settlements of the peace were made.

History appropriately stages her great events. If the setting of the old was on the Quai d'Orsay, the new was in a twentieth century office, on the third floor of the Hotel Crillon. Here, at a long table in Colonel House's rooms [E.M. House, Wilson's confidante], with little ceremony or secrecy, were held the meetings of the League of Nations Commission. Here was framed the covenant which stands at the head of the treaty and represents the American contribution to the settlement.

So the drama played itself during the first half of the conference, from January until April, growing daily more intense, more bitter, and leading swiftly to the inevitable crisis. The world outside was slipping every week into a deeper morass of anarchy and chaos; starvation was spreading over half of Europe, and nearly a score of little fires of war, left over from the great one, still burned fiercely. It was a veritable race between peace and anarchy.

In April the inevitable crisis came; and with it the setting inevitably changed. Neither the old nor the new would yield; neither Clemenceau nor Wilson would bend. Both these leaders believed they were

in the right. And yet, peace had to be made and made at once.

The third and last act was staged in the quiet study of President Wilson on the stony hill of the Place des Etats Unis. Here four men, mostly old and worried and worn, met day after day for weeks, to settle the fate of the world. One of them, Clemenceau, had been shot through the body by a would-be assassin, and sometimes in the meetings of the four [he] coughed violently. Another of them, the President, lay ill for days in the adjacent bedroom.

But if the setting had changed, the motif of the drama was exactly the same, the same struggle between Old and New—between Clemenceau and Wilson. The central issue was then exactly what it continues to be today—the issue of French security. For over four years now the history of the world has revolved around French fear and French ambition, exactly as the life of a family sometimes centers around the doings of a single hysterical member of it. There have been other important issues—that of reparations, for example, and territorial, economic and other problems—but the core of the situation has been French security.

The Americans and the British in desperation sought finally to meet the problem of French fear by a special Anglo-American compact to protect France in case of emergency until the League of Nations should be actively functioning. If America had gone forward and ratified this special Anglo-American compact and had whole-heartedly joined the League—and by virtue of that action had taken a place on the World Court and the Reparations Commission—the present chaos in Europe might have been prevented. As it is now, the peace and good order of civilization are being pounded to death upon the wild obsession of one nation and the vacillation of two others.

So the struggle raged there in the quiet study of the President of the United States. At one time the conference was near a complete break-up—the President considered the withdrawal of the United States and even ordered the *George Washington* to sail from the United States to take home the American delegation. But the French of all things desired least to see allied unity broken; and besides, peace had somehow, on some terms, to be made.

The third act of the peace drama, therefore, contained not only the crisis but the swift settlements and compromises which followed it. Wilson had to accept certain terms in the treaty that he did not like and did not want and that have proved themselves to be bad. But Clemenceau also had to accept certain diminutions of French claims and a League of Nations which the French did not fully approve.

Such, then, became the famous Treaty of Versailles. What else was to be expected where the

purposes behind the leaders were so different—where there was no real or solid agreement of public opinion in the world? It was a compromise between the two. It satisfied in its terms many of the demands of the Old Diplomacy—for territory, for security, for crushing reparations, essentially modified and toned down indeed by American proposals, or by the protests of British liberals—but on the other hand, it contained the great central item of the New Diplomacy, for which Wilson chiefly fought—the Covenant of the League of Nations—somewhat weakened by French opposition.

The choice of mankind since the Treaty of Versailles is not a whit different from what it was before; a nation may dwell upon all the bitterness of this treaty and demand the execution, to the last comma, of all of the injustice wrapped up in certain of its terms. Some nations there are—France, for example—that are now pursuing this course and, unless arrested, will lead the way to new and more dreadful war. Or a nation may seize upon the constructive and forward-looking aspects of it with determination to use them to the uttermost, and lead the way to peace. No nation is yet, unfortunately, doing this whole-heartedly. The nation best fitted to do it, America, has so far rejected its opportunity of world leadership, has considered its interests, its fears, and its rights, rather than its duties and responsibilities.

We are willing to give excellent—and cheap—advice to Europe; we are willing to contribute a little of our substance in spare change philanthropy to help feed the starving; but when it comes to taking hold sincerely of the great main problem of world order, our vacillation does not much differ from cowardice. We preach to bankrupt Europe that it must reform its finances, and at the same time demand that Europe pay us the last penny of the \$11,000,000,000 she owes us. Furthermore, to prevent her paying us in the only way she can, by the shipment of goods, we set up a tariff wall sky high so that our own industries may not be injured. At the same time that we scold the European nations for their economic greed, we are sending our traders and exploiters throughout the world, seizing raw material, and “grabbing” concessions.

President Wilson expressed the soul of America at its noblest and truest. His principles were true when he uttered them; they are still true. There can be no peace or justice in the world without a return to them and an honest attempt to apply them. ■

Ray Stannard Baker, the director of the American delegation press bureau at the Paris peace conference, was a recognized authority on the Versailles Treaty and the League of Nations. He wrote an authorized biography of Woodrow Wilson.

—OCTOBER, 1938

In the October, 1938, issue of Current History, Winston Churchill—an opponent of Great Britain's appeasement policy—was asking the British nation to "rise in its ancient vigor" to save civilization.

What Can England Do About Hitler?

BY WINSTON CHURCHILL

Prime Minister of Britain during World War II

I do not feel that there is any immediate danger of a major land war breaking out over Czechoslovakia. I know it is very rash to make such a statement, but when there is so much natural but misdirected alarm, one must run some risks in stating one's honest opinion. The first reason is that, in the opinion of many good judges, Germany is not ready this year for such an ordeal as a major land war. The second reason carries more conviction to me, because obviously the first is based upon facts which one cannot measure and secrets which one cannot probe. It is that I cannot see that it would be to the interest of the rulers of Germany to provoke such a war.

Are they not getting all they want without it? Are they not achieving a long succession of most important objectives without firing a single shot? Is there any limit to the economic and political pressure which, without actually using military force, Germany will be able to bring to bear on [Great Britain]. England can be convulsed politically, she can be strangled economically, she is practically surrounded by superior forces, and unless something is done to mitigate the pressure of circumstances, she will be forced to make continuous surrenders until finally her sovereignty, her independence, her integrity, have been destroyed. Why, then, should the rulers of Germany strike a military blow? Why should they incur the risk of a major war?

Moreover, I think it is to be considered that there are other, even more tempting lines of advance open to Germany's ambitions. A serious disturbance among the Hungarian population in the Rumanian province of Transylvania might offer a pretext for the entry of German troops, at a Hungarian invitation or without it. Then all the possibilities of the oil and food of Rumania would be open. Here, again, force may be avoided and virtual annexation may be veiled in the guise of a compulsory alliance.

But the story of this year is not ended at Czechoslovakia. It is not ended this month. The might behind the German Dictator [Adolph Hitler] increases daily. His appetite may grow with eating.

Do not let anyone suppose that this is a mere question of hardening one's heart and keeping a stiff upper lip, and standing by to see Czechoslovakia poleaxed or tortured as Austria has been. Something more than that particular kind of fortitude will be needed from us. It is not only Czechoslovakia that will suffer. Look at the states of the Danube Basin. First and foremost there is Yugoslavia. Is nothing being done to ascertain what Yugoslavia would do, assuming that Great Britain and France were prepared to interest themselves in the problems of the Danube Basin? Yugoslavia might well be gained, and I am told that the effect of that on Bulgaria would probably be to draw her into the same orbit. Then there is Rumania, so directly menaced by the potential German movement to the East. These three countries if left alone, and convinced that there is no will power operating against the dictators, will fall one by one into the Nazi grip and system. What then will be the position of Greece and Turkey?

It is not possible that decided action by France and Great Britain would rally the whole of these five states as well as Czechoslovakia, all of whom have powerful armies, who together aggregate 75,000,000 of people, who have several millions of fighting men already trained, who have immense resources, who all wish to dwell in peace within their habitations, who individually may be broken by defeat and despoiled, but who, united, constitute an immense resisting power? Can nothing be done to keep them secure and free and to unite them in their own interests, in French and British interests and, above all, in the interests of peace? Are we really going to let the whole of these tremendous possibilities fall away without a concerted effort of any kind? If we do, let us not suppose for a moment that we shall ourselves have escaped our perils. On the contrary, we shall have multiplied our perils, for a very obvious reason. At present Germany might contemplate a short war, but, once she has laid hands on these countries and extended her power to the Black Sea, the Nazi regime will be able to feed

itself indefinitely, however long war may last, and thus we should have removed another of the deterrents that stand between us and war. The Nazification of the whole of the Danube States is a danger of the first capital magnitude to the British Empire. Is all to go for nothing? Is it all to be whistled down the wind? If so, we shall repent in blood and tears our improvidence and our lack of foresight and energy.

It has been said that if we do not stand up to the dictators now, we shall only prepare the day when we shall have to stand up to them under far more adverse conditions. Two years ago it was safe, three years ago it was easy, and four years ago a mere dispatch might have rectified the position. But where shall we be a year hence?

Let me give a warning drawn from our recent experiences. Very likely this immediate crisis will pass, will dissipate itself and calm down. After a boa constrictor has devoured its prey it often has a considerable digestive spell. It was so after the revelation of the secret German air force. There was a pause. It was so after German conscription was proclaimed in breach of the Versailles Treaty. It was so after the Rhineland was forcibly occupied. Now, after Austria has been struck down, we are all disturbed and alarmed, but in a little while there may be another pause. There may not—we cannot tell. But if there is a pause, then people will be saying, "See how the alarmists have been confuted; Europe has calmed down, it has all blown over, and the war scare has passed away." Neville Chamberlain will perhaps repeat what he said a few weeks ago, that the tension in Europe is greatly relaxed. The *Times* will write a leading article to say how silly those people look who on the morrow of the Austrian incorporation raised a clamor for exceptional action in foreign policy and home defense, and how wise the Government was not to let itself be carried away by this passing incident.

All this time the vast degeneration of the forces of parliamentary democracy will be proceeding throughout Europe. Every six weeks another corps will be added to the German army. All this time important countries and great rail and river communications will pass under the control of the German General Staff. All this time populations will be continually reduced to the rigors of Nazi domination and assimilated to that system. All this time the forces of conquest and intimidation will be consolidated, towering up soon in real and not make-believe strength and superiority. Then presently will come another stroke. Upon whom? Our questions with Germany are unsettled and unanswered. We cannot tell. What I dread is that the impulse now given to active effort may pass away when the dangers are not diminishing, but accumulating and gathering as country after country is involved in the

Nazi system, and as their vast preparations reach their final perfection.

The other day Lord Halifax said that Europe was confused. The part of Europe that is confused is that part ruled by parliamentary governments. I know of no confusion on the side of the great dictators. They pursue their path towards somber and impressive objectives with ruthless consistency and purpose. They know what they want, and no one can deny that up to the present at every step they are getting what they want. When I look back upon the last five or six years I discern many lost chances when we could have made a stand.

The grave and perhaps irreparable injury to world security took place in the years 1932 and 1935 in the tenure of the Foreign Office of the present Chancellor of the Exchequer (Sir John Simon). In those days I ventured repeatedly to submit to the House the maxim that the grievances of the vanquished should be redressed before the disarmament of the victors was begun. But the reverse was done. Then was the time to make concessions to the German people and to the German rulers. Then was the time when they would have had their real value. But no such attempt was made. All that was done was to neglect our own defenses and endeavor to encourage the French to follow a course equally imprudent. The next opportunity when these sibylline books were presented to us was when the reoccupation of the Rhineland took place at the beginning of 1936. Now we know that a firm stand by France and Britain with the other Powers associated with them at that time, and with the authority of the League of Nations, would have been followed by the immediate evacuation of the Rhineland without the shedding of a drop of blood, and the effects of that might have been blessed beyond all compare, because it would have enabled the more prudent elements in the German Army to regain their proper position, and would not have given to the political head of Germany that enormous ascendancy which has enabled him to move forward.

Now we are in a moment when a third move is made, but when that opportunity does not present itself in the same favorable manner. Austria has been laid in thrall, and we do not know whether Czechoslovakia will suffer a similar attack.

For five years I have talked to the members of the House of Commons on these matters—not with very great success. I have watched this famous island descending incontinently, recklessly, the

(Continued on page 50)

Winston Churchill was one of the major political figures of the twentieth century. This article was written just before he replaced Neville Chamberlain as Prime Minister of Great Britain.

—NOVEMBER/DECEMBER, 1950

During the postwar years, the United States struggled to counter what it saw as "the darkening shadow of Soviet power over Europe." In this article, which originally ran in our November and December, 1950, issues, Richard Van Alstyne reviewed the wartime relationship between the Allies, the famous agreements at Yalta and Potsdam, and the failure of United States policy, three factors that shaped the world and led to the cold war era.

The United States and Russia in World War II

BY RICHARD W. VAN ALSTYNE

Author, American Diplomacy in Action

FIVE short years ago [in 1945], the black cloud of a third world war was no bigger than a man's hand. To an untrained eye it was not even visible. The Potsdam Conference* had wound up the fighting in the West; the capitulation of Japan was to follow in another fortnight. Winston Churchill's warning, delivered at Fulton, Missouri, in March, 1946, and his plain statement of the need for a close Anglo-American partnership were greeted with coolness, if not hostility. United Nations enthusiasts joined with former isolationists in condemning the proposal as an attempt of an old-fashioned British imperialist to draw the United States into a special alliance and break up the supposedly new order of collective security. President Harry S. Truman received a shower of criticism for sitting on the platform with the former British prime minister and thereby identifying himself with Churchill's "reactionary" ideas. But it is plain now that the President's act was deliberate and that it took courage. The Fulton speech was fully as much Truman's as it was Churchill's. The President was giving the American people a signal. He and Churchill knew some things of which their hasty critics were oblivious. Not until the following September, when in Stuttgart, Germany, Secretary James Byrnes delivered a studied warning to the Soviets, did the American public begin to realize that all was not well.

Meanwhile the fighting overseas had no sooner been over than a great tidal wave of sentiment rose up within the United States for "bringing the boys back home." Whether or not against its better judgment, the Truman administration bowed to the demands. Feverish demobilization set in; Congress turned a deaf ear to pleas from responsible men for

a continuation of universal military service; and within less than six months after Japan's surrender the United States was militarily so weak that costly steps had to be taken through voluntary enlistment to fill the depleted ranks of its occupation forces abroad. The greatest—and most irresponsible—demobilization in history had taken place. The movement was in flat contradiction to the basic principle of the United Nations Charter—which the American people had so enthusiastically endorsed—that peace rests upon the military equality of the three most powerful members of the United Nations. Congress and the people paid no heed to warnings that evil results would follow these impulsive acts.

Today it is not uncommon to hear President Franklin Delano Roosevelt praised or blamed for his wartime conduct of affairs with the Soviet Union. "If only President Roosevelt had lived," wistfully say some, "things would not have come to such a pass." From others come sweeping condemnation of what they are pleased to describe as the shameful surrender at Yalta. Few are mindful of the tragic error of the great demobilization, for which neither Roosevelt nor Truman can be held responsible. For that great blunder the American people can find no scapegoat.

World War II ended in total victory. Among the victors, Britain and the United States had together knocked out Italy; the United States, with some British help, vanquished Japan; but only the combination of Anglo-American and Soviet power broke the back of Nazi Germany. Invaluable to the Anglo-American cause was the steadfast support of the British dominions, notably of Canada in the North Atlantic, and of the numerous resistance movements and governments-in-exile that had found fair haven in London from the storm that had burst upon them. Among the latter was the Polish,

*For a list of the documents on World War II printed in *Current History*, see *Current History*, October, 1953, pp. 257-258.

whose legitimacy it soon suited the Soviets to deny. Thinly disguising their opinion that this government was an Anglo-American puppet, the Russians trained a group of Polish Communists and seated them at Lublin as the true provisional government of Poland. Tremors of disagreement over the Polish Question had shaken the foundations of the alliance of the three great Powers ever since December, 1941; and the issue of the Lublin versus the London Poles, which reached a climax in February, 1945, when the three Powers met at Yalta, threatened a jolt severe enough then and there to bring down the edifice of Soviet friendship toward the West. The appearances of unity, such as it was, were restored, and the three great allies marched on gloriously together to victory over the most formidable of their enemies.

Not unnaturally Great Britain was the first to sense the darkening shadow of Soviet power over Europe and to express foreboding. The occasion was Anthony Eden's visit to Moscow, Christmas of 1941. Churchill spent the same holiday in the White House. Through Eden he and Roosevelt learned of Stalin's basic demands. These were: the incorporation of the Baltic states and also portions of Finland, Poland, and Rumania in the Soviet Union; the dismemberment of Germany and the payment of reparations in kind, though not in money; the restoration of Austria to independence; and various territorial changes in Eastern Europe affecting Czechoslovakia, Yugoslavia, Albania, and Turkey. The issues of the Baltic states and of Poland aroused the opposition of the Western Powers at once. Bound together by the Atlantic Charter, to which the Soviet Union had paid lip service but which clearly it did not take seriously, Britain and the United States refused their consent. The Soviet effort to draw the British into a separate agreement met with failure. Henceforward Stalin kept his own counsel, until at Yalta the Polish question burst into the open; but Russian ambitions left an impression on London and Washington.

Bent on keeping Russia at their side in the war against Germany, the Anglo-American Powers knew that with victory they would come face to face with the Soviets. Russian hopes for the hegemony of Europe rested, so the British government believed, on either winning over the Anglo-American Powers or, in any event, upon an early withdrawal of American armies from Europe after the close of hostilities. Against this realistic evaluation of the probabilities on the part of the British Foreign Secretary, Mr. Roosevelt and Hopkins [Harry Hopkins, Roosevelt's personal representative] took the position that, by cultivating the Russians, giving them full support in prosecuting the war, and side-stepping controversial issues until the war was

over, they could inculcate in the Soviet government a real desire to support the cause of the United Nations. It seems likely that the Americans did not want to be infected with the British foreboding. They had accurate sources of information on Russian intentions, but they did not want the dream of future Russian friendship to be spoiled.

BALKAN INVASION

British fears of Russia thus coming to the surface early in the struggle, a certain disagreement with the United States set in over methods and tactics. Thus Mr. Churchill, after the North African invasion, earnestly sought American consent for an invasion of the Balkans to the end partly of keeping Russia from gaining control therein. But the American Army chiefs, with eyes fixed on striking at Germany through France, were adamant against a Balkan campaign. The Americans were single-minded in their determination to defeat the Germans in the speediest manner possible. The British had no quarrel with this, but felt that in the long run there was a Russian problem that might prove as serious as the German. Disappointed in his hope of a Balkan campaign, Churchill in June, 1944, won the President's reluctant consent to an Anglo-Soviet arrangement for dividing the responsibility for Greece and Rumania between them. This division corresponded to the actual military situation at the time, and by a separate Anglo-Soviet agreement in October, it was taken for granted that Russia would exercise preponderant influence in Rumania and Bulgaria and that Britain would supervise the affairs of Greece.

Over the treatment to be meted out to the Germans the Anglo-American Powers and the Russians found little on which to disagree. Reacting instinctively to the famous phrase used by General Ulysses S. Grant in 1865, Roosevelt publicly announced at Casablanca that nothing less than unconditional surrender would be required. Stalin's bill of particulars on Germany, already offered to Eden in December, 1941, was the same thing in substance. At a conference in Moscow in October, 1943, the three Powers agreed to undertake occupation of the enemy country, to wholly disarm Germany, to impose a reparations program upon her, and to extirpate the Nazi Party. At Tehran Roosevelt offered a plan for the separation of Germany into five autonomous states, to which Stalin took no serious exception; and at the close of the Yalta Conference the three great allies publicly pronounced the doom of Germany. "It is our inflexible purpose," they declared, "to destroy German militarism and Nazism and to ensure that Germany will never again be able to disturb the peace of the world."

Locked in with the German question was Mr. Roosevelt's zeal for a permanent United Nations organization. Despite the misgivings over Russian ambitions aroused in December, 1941 — misgivings which the British government never was able to forget — the President's confidence in Russia appears to have risen steadily during the war years. The core of the United Nations, according to Roosevelt, would consist of the "Four Policemen" — the U.S.S.R., the U.S.A., the U.K., and China — and the countries which the "policemen" would need to watch most closely were Germany and Japan. With these enemy nations put in their proper place, the peace of the world was good for fifty years. All through 1942 and 1943 Roosevelt showed an eagerness to meet Stalin face to face. Moreover, we must remember, American ideas of waging war against Germany agreed with Russian more than with British ideas. The "Second Front" in France was the darling of the American Army as it was of the Soviet Union, a point of agreement that Molotov in his visit of May, 1942, to Washington did not hesitate to exploit.

The President did not get his wish to meet Stalin until December, 1943, when at Tehran he repeated with considerable elaboration the ideas respecting the "Four Policemen" that he had expounded to Molotov. The proposed organization was to consist of an assembly of nations, large and small, on a world-wide scale, an executive committee made up of the "Four Policemen" and certain other states, and a third body which was to be limited in membership to the Policemen. Stalin's reactions were very simple: three policemen were all that were needed to keep the peace; China could not qualify; and as for the world-wide assembly, the Soviet leader dismissed it with a shrug. His indifference was undoubtedly genuine: later, after the Dumbarton Oaks Proposals had been formulated, he confessed that he had not given them his attention. Roosevelt kept on with his plans, however; from a meeting of the four Powers, which lasted two months through the autumn of 1944, emerged a formal set of Proposals for a United Nations organization; and at Yalta, the Americans being determined not to let the opportunity slip, the others acquiesced somewhat reluctantly on a definite date for the Charter meeting in San Francisco.

At Yalta, after the four powers had met at Dumbarton Oaks and had agreed upon the Proposals for the United Nations, American (and also British) concepts of what the new organization ought to be appeared to the Russians in a more elaborate, but indubitably less realistic light. The lesser and even the smallest nations were to have a voice. Stalin immediately objected, singling out Albania for his special scorn. To which Churchill responded: "The

eagle should permit the small birds to sing, and care not wherefore they sing." To this the Russian made no answer. The other two powers granted him two extra seats in the Assembly, and this pleased him; but Stalin's main thought remained fixed on the Three Policemen. The peace of the world, he hastened to explain; centered on the ability of the Three to avoid quarrels among themselves. Neither Roosevelt nor Churchill could find fault with this sentiment.

If the American desire to enlist Russia in the cause of the United Nations is readily understandable, the eagerness with which Russian help against Japan was sought is less so. The matter cannot be discussed lucidly, because we lack a clear record of the inside pressures in Washington upon the Chief Executive to keep him on the track of a Russian alliance. Those pressures came chiefly, if not exclusively, from the War Department, which soon after Pearl Harbor tried to get the Soviet Union to grant bases in Eastern Siberia for air operations against the island empire. To the very end of the conflict with Japan, it was axiomatic with the army chiefs that an invasion would be necessary. Operation Coronet — the final step in the subjugation of Nippon — was planned and scheduled to begin early in the spring of 1946. Viewing this operation with grave hesitancy, the army wanted the Russians to invade Manchuria and keep the Japanese garrison there — the famed Kwantung Army — preoccupied.

Even after the Potsdam Conference in July, 1945, the army chiefs kept up their pressure to get Russia in the war. But since the Soviets had no motive of their own to join hands with the United States in crushing Japan, they remained unresponsive. They had their nonaggression pact of 1941 with Japan and all through the war they maintained an elaborate and meticulously careful appearance of neutrality in the Far East. With canny shrewdness, Stalin volunteered to Mr. Hull at Moscow in October, 1943, that, *after* the defeat of Germany, he would join in making war on Japan. This bait may or may not have led President Roosevelt at Tehran to offer Stalin the port of Dairen, subject only to its becoming a free port under international guarantee.

"I only want to have returned to Russia what the Japanese have taken from my country," said Stalin to Roosevelt at Yalta. To which the President replied: "That seems like a very reasonable suggestion from our ally — they only want to get back that which has been taken from them." And so a three-power agreement was concluded to the effect that "in two or three months after Germany has surrendered and the war in Europe has terminated," Russia would enter the war against Japan on condition that her position in Outer-Mongolia was pre-

served and her former rights, "violated by the treacherous attack of Japan in 1904," were restored. These rights included the southern part of Sakhalin and its adjacent islands, the restoration of Russia's "pre-eminent interests" in the commercial port of Dairen and of the lease of Port Arthur as a naval base, and the joint operation with the Chinese of the Chinese Eastern and South Manchurian railroads. The Kurile Islands were also to "be handed over" to the Soviets. Since these arrangements required the concurrence of [Chinese Nationalist President Generalissimo] Chiang Kai-shek, it was agreed that the President would "take measures in order to obtain this concurrence on advice from Marshal Stalin." In return, the Soviet Union agreed to recognize the "full sovereignty" of China in Manchuria, and to conclude a "pact of friendship and alliance" with the National Government of China "in order to render assistance to China with its armed forces for the purpose of liberating China from the Japanese yoke."

Two features about this agreement arrest the attention. One is that it was a deal between Roosevelt and Stalin. Churchill was not even, so far as is known, a party to the conversations respecting the Far East. Was he left out by his own wish, or because the other two desired to exclude him? He signed the finished agreement, it is true; but Britain being a power with important interests in the Far East, Churchill may well have concluded that he could not afford to be left out. His mere concurrence does not mean that he looked with favor upon this Russian-American bargain. His ensuing volumes should have some interesting things to say about the matter. We note, furthermore, that the President alone was "to take measures" to get Chiang Kai-shek into line. This is a most intriguing clause. Soon after the Yalta Conference had closed, the Chinese Embassy in Washington grew suspicious, but when it made inquiries at the State Department it met with denials. "Measures" must subsequently have been taken, however, for on August 14, 1945, China signed in Moscow a treaty which carried out in detail the terms of the secret Yalta deal. As yet we have no documents to fill in the gap between the two agreements.

A second and equally interesting feature about the Roosevelt-Stalin agreement is the casualness with which Russia pledged her entry into the war against Japan. It was to occur "in two or three months" after Germany had surrendered. Stalin pleaded his need for time in which to transfer troops to the Manchurian border, and Roosevelt accepted the argument. But surely the Soviets were in no hurry. In "fulfillment" of their pledge they crossed the Manchurian border on August 8, 1945, two days after the American atomic attack on

Hiroshima and two days before the Emperor of Japan surrendered!

We have now looked at American war aims in terms of (1) the decisive defeat of Germany and Japan, (2) the firm establishment of a United Nations, and (3) a lasting friendship with the Soviet Union.

But there was a fourth aim that cannot be overlooked. This was the unification of China under the National Government, and the elevation of that country to the rank of a great power. China was the fourth Policeman: her help in the war was needed against Japan, and in the peace the beaten enemy would be the principal object of her watch. Such was the assumption on which American wartime policy—military and diplomatic—in the Far East was based. Secretary [Henry] Stimson and General [George] Marshall maintained fixed opinions throughout the whole course of the war that the assistance of China as well as of Russia was indispensable for the defeat of Japan. President Roosevelt accepted these views and acted upon them. The costly Burma operations and the development of the transport service over the Himalayas were explained on the ground that China must be kept in the war in order to defeat the Japanese armies. But it is to be noted that neither Russia nor China had anything to do with the Japanese surrender. When Japan gave up, her armies, whether in Manchuria or in China and Southeast Asia, melted away. No large-scale engagement ever took place on the mainland of Asia.

We cannot doubt Mr. Roosevelt's great dreams for Nationalist China. Japan had been told in November, 1941, before Pearl Harbor, that she must recognize Chiang Kai-shek in order to have peace with the United States. And Roosevelt personally conferred with Chiang at Cairo in November, 1943, just prior to his meeting with Stalin in Tehran. To Stalin, he stressed the importance of China's future. From Churchill, he expected eventual sacrifices of British interests, notably of Hong Kong, for China's benefit. He never seems to have doubted that he would get British cooperation. Of the Russians, the State Department had asked a helping hand at least as early as 1942. Their moral influence with the Chinese Communists would be invaluable. "We did not put any specific proposal to Russia on this score during my period of service," writes Mr. Hull, "but we repeatedly talked with her. . . ." No doubt the Russians in this case made good listeners: the Secretary was unable to record

(Continued on page 52)

Richard W. Van Alstyne, a contributing editor of *Current History*, wrote numerous articles for the magazine over a four-decade period.

—SEPTEMBER, 1947

After World War II ended in 1945, the United States resolved to avoid the suffering imposed on Europe after the first world war and to work for "a sane economic construction of Europe"—a policy against hunger, poverty and chaos. In our September, 1947, issue, Sidney B. Fay discussed this philosophy, embodied in the Marshall Plan.

The Marshall Plan

BY SIDNEY B. FAY

Professor Emeritus of History at Harvard University (1876-1967)

ON June 5, 1947, upon receiving an honorary degree before a distinguished gathering at Harvard's Commencement, Secretary of State George C. Marshall made a very noteworthy proposal which has come to be known as "The Marshall Plan."

In many respects it was the most important pronouncement made by any statesman since the active fighting ceased two years ago. It held forth the possibility of a sane economic reconstruction of Europe and a gradual restoration of normal world trade and production that is so much needed. But the discussion it received soon revealed the hates, fears and national selfishness by which Europe is torn apart, and especially the deep cleavage between the totalitarian communistic and the democratic capitalist countries. It revealed a situation which already existed but which statesmen had hesitated to acknowledge publicly—the fact that the optimistic idea of "One World" had already been shattered by the "Iron Curtain" which stretches from the Elbe to Trieste.

Secretary Marshall began: "The world situation is very serious;" more serious than Americans realize, because "the people of this country are distant from the troubled areas of the earth, and it is hard for them to comprehend the plight and consequent reactions of the long-suffering peoples, and the effect of those reactions on their governments." He pointed out that the physical loss of life, the visible destruction of cities, factories, mines and railroads "was probably less serious than the dislocation of the entire fabric of European economy." After analyzing the causes of this he said: "It is logical that the United States should do whatever it is able to do to assist in the return of normal health in the world, without which there can be no political stability and no assured peace. Our policy is directed not against any country or doctrine, but against hunger, poverty, desperation and chaos."

In essence, the Marshall Plan called on Europe (1) to draw up a balance sheet of European re-

sources and needs; (2) to work out a blueprint for self-help; and (3) to submit to the United States a program under which United States dollars may be best used to help Europe help itself.

A few persons protested that Secretary Marshall was bypassing the United Nations Organization and thus weakening it; that the recovery program should have been handed over to the United Nations Economic and Social Council. But many of its 18 members do not represent European states and are not primarily acquainted with Europe's special problems.

Aside from this and some other minor objections by selfish American isolationists, the Marshall Plan was generally greeted with enthusiasm everywhere in the world except in Soviet Russia. It was regarded as a statesman-like step toward overall and long-time planning instead of piecemeal and haphazard aid which we had given in special emergencies, such as President Truman's \$400,000,000 aid to threatened Greece and Turkey.

It has also revived morale in Europe by encouraging countries to think that they could help themselves instead of continuing to be mere helpless recipients of American aid.

It recognized that it is usually easier to work for economic than political cooperation and unity. The former often makes possible the latter; the Prussian economic union (*Zollverein*), for instance, paved the way for Bismarck's unification of Germany. Some enthusiasts hoped that Secretary Marshall's proposal for common economic action might eventually lead to some kind of politically united Europe, such as has been urged by Aristide Briand, Winston Churchill and so many others.

The Marshall Plan was especially welcomed by Foreign Secretary Ernest Bevin in Britain and by Foreign Minister Georges Bidault in France because these two countries were having to spend more rapidly than anticipated the dollar credits already granted to them by the United States. Britain and France would therefore soon be faced with

the dire prospect of inability to buy the food, raw materials, and machinery vitally needed to keep up even their already low standard of living.

Mr. Bevin flew to Paris on June 17 to consult with Mr. Bidault on the practical steps to give effect as soon as possible to Secretary Marshall's proposal. Two days later, in order to secure Russia's cooperation, they invited Soviet Foreign Minister V. M. Molotov to join them in Paris.

After four days of hesitation, Molotov accepted their invitation, and on June 27 flew to Paris. He brought with him such a large delegation of experts—more than 80—that the Western Powers were encouraged to think that he might seriously cooperate with them. Hopes for One World again revived. But these hopes soon proved vain. After five days of heated discussion at Paris between Bevin, Bidault and Molotov, the latter flatly rejected on July 2 the steps proposed by Britain and France, and at 4 A.M. [Molotov] abruptly flew back to Moscow.

The Marshall Plan caught Russian diplomacy off balance. Suddenly confronted with a proposal for European cooperation, backed by American food, machinery and dollar credits, the Russians were uncertain what attitude to take. They wanted to share in any aid offered by the United States, but they were shy of any cooperative action which would revive Europe and increase America's prestige and influence. For a brief period there was a curious lack of coordination between the Press and the Government. The Russian Press had sharply attacked Marshall's Harvard address as "a plan for political pressure with dollars" and denounced it as meaning "interference in the internal affairs of other countries." But just before Molotov announced that he would go to Paris, the Russian Press suddenly reversed itself for a few days, and the official news agency, *Tass*, stated that the Soviet Government was "considering" the Marshall Plan and was "interested" in receiving more information about it.

WHY THE CHANGE?

Poland and Czechoslovakia, also desperately in need of American aid and anxious for a renewal of their normal economic ties with the West, had enthusiastically endorsed the Marshall Plan. The Kremlin evidently feared these states, and possibly also Hungary, Bulgaria and Rumania, might break away from Soviet economic control, and that it would therefore be wise to gain time and, at least, send Molotov to Paris to look into or to thwart the proposals.

This fear of losing economic control over Poland and Czechoslovakia seems confirmed by one of the arguments used by Molotov at Paris against the Marshall Plan:

Today pressure might be put on Poland to produce more coal even though it be at the expense of the other branches of Polish industry because that is in the interests of certain European countries; tomorrow it will be said that Czechoslovakia must be required to increase her agricultural production and to reduce her engineering industry, and it will be said that Czechoslovakia should receive machinery from other European countries wishing to sell goods at higher prices.

Doubtless Mr. Molotov had also other motives for going to Paris. He may have feared that otherwise there might be formed a European bloc against Russia. He may have feared that Western Germany would become more closely consolidated against her. And he may have hoped to modify the Marshall Plan so that American aid should be doled out directly to all countries, including Russia, and that each should be left to use the aid as it saw fit without regard to the interests of Europe as a whole. That, at any rate, is what he proposed at Paris. The way the Marshall Plan was handled could have been used to illustrate the way *Tass* and the Russian press misrepresent facts and try to inculcate Soviet ideology.

One Russian paper in reporting Marshall's Harvard address represented him as saying that one purpose of his proposal was to promote American exports and thus prevent the threatening economic crisis in the United States. There was not a word in Marshall's address justifying this false statement. Yet it was repeated in the *Tass* broadcast from Moscow on June 29:

Quite obviously . . . the U.S.A., for its part, is also interested in making use of its credit possibilities for expanding its external markets, especially in view of the approaching crisis. When, in connection with Mr. Marshall's speech, the French and British Governments suggested a conference of the three Ministers, the Soviet Government received this proposal favorably, despite the fact that the system of planning on which the Socialist national economy in the U.S.S.R. is based precludes the possibility of the various crises and economic shake-ups mentioned.

This Russian press misrepresentation of the Marshall Plan as a proposal motivated to promote American export trade and prevent a capitalist collapse in the United States was soon parroted in the Soviet-dominated countries, and even by Pierre Cot in the French Assembly. It contained a danger

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Sidney B. Fay was a contributing editor of *Current History* for many years. His two-volume book *Origins of the World War*, written in 1928, is considered a classic in its field.

—JANUARY, 1968

In hindsight, the most disastrous event for the United States in the postwar period was the Vietnam War, an action taken in the name of "containment" of the expansion of communism. Hans Morgenthau, writing in January, 1968, discussed the United States involvement in Southeast Asia in the 1950's and 1960's. Selections follow.

U.S. Misadventure in Vietnam

BY HANS J. MORGENTHAU

Author, *A New Foreign Policy for the United States*

THE policies the United States is pursuing in Vietnam are open to criticism on three grounds: they do not serve the interests of the United States; they run counter to American interests; and the United States objectives are not attainable, if they are attainable at all, without unreasonable moral liabilities and military risks.

In order to understand the rationale underlying our involvement in Southeast Asia one must go back to the spring of 1947 when the postwar policies of the United States were formulated and put into practice—the policy of containment, the Truman doctrine and the Marshall Plan. These policies pursued one single aim by different means: the containment of communism. That aim derived from two assumptions: the unlimited expansionism of the Soviet Union as a revolutionary power, and the monolithic direction and control the Soviet Union exerted over the world Communist movement.

It is against this background that one must consider the involvement of the United States in Southeast Asia. For the modes of thought and action growing from the specific European experiences of the postwar period still dominate today the foreign policies of the United States, paradoxically enough not so much in Europe as elsewhere throughout the world. The Administration consistently justifies its Asian policies by analogy with its European experiences. The United States thinks of Asia in 1968 as it thought of Europe in 1947, and the successes of its European policies have become the curse of the policies the United States is pursuing in Asia. For the problems Americans are facing in Asia are utterly different from those they dealt with in Europe two decades ago, and the political world in Europe has been radically transformed.

The active involvement of the United States in Southeast Asia is a response to the Korean War. That war was interpreted by the United States government as the opening shot in a military campaign for world conquest under the auspices of the Soviet Union. In view of this interpretation, it was consis-

tent for the United States to defend South Korea against the North Korean Communists, as it would have defended Western Europe against the Red Army had it stepped over the 1945 line of demarcation. Similarly, it was consistent for the United States to support with massive financial and material aid the French military effort to defeat the Vietnamese Communists. When France was threatened with defeat in 1954, it was consistent for Secretary of State John Foster Dulles and Admiral Arthur Radford, then chairing the Joint Chiefs of Staff, to recommend that President Dwight Eisenhower intervene with American airpower on the side of France. Finally, it was a logical application of this policy of containing communism in Asia to establish and support an anti-Communist regime in South Vietnam, after the division of the country in 1954. However, when the disintegration of this regime became acute the United States continued this policy of containment as though the nature of world communism had not changed since 1950 and as though the political disintegration of South Vietnam posed for the United States an issue similar to the North Korean invasion of South Korea. It was at this point that our policy went astray.

While it was plausible—even though it has proven to be historically incorrect—to attribute the outbreak of the Korean War to a worldwide Communist conspiracy, there is no historical evidence whatsoever to interpret in that manner what has happened in Vietnam since 1960. The period of history since [Soviet General Secretary] Nikita Khrushchev's denunciation of Josef Stalin in 1956 has been characterized by the disintegration of the Communist bloc into its national components, each pursuing to a greater or lesser degree its own particular national policy within a common framework of Communist ideology and institutions. The influence that the Soviet Union and China are still able to exert over Communist governments and movements is not the automatic result of their common Communist character, but of the convergence

of national interests and of particular power relations.

This has always been true of the Vietnamese Communists. Many of them were nationalists before they became Communists, and it was only the indifference or hostility of the West that made them embrace communism. Even under the most unfavorable conditions of war with the United States, the government of North Vietnam has been able to retain a considerable measure of independence vis-à-vis both the Soviet Union and China by playing one off against the other. The Vietnamese Communists are not mere agents of either the Soviet Union or China. The sources of their strength and their arms are indigenous and must be judged on their merits.

This being the case, the professed United States war aim, "to stop communism" in South Vietnam, reveals itself as an empty slogan. It must be made concrete by raising the questions: what kind of communism is the United States fighting in South Vietnam? and what is the relationship of that communism to the United States interest in containing the Soviet Union and China? The answers to these questions reveal the unsoundness of American policy. The fate of communism in South Vietnam is irrelevant to the containment of Soviet or Chinese communism since Vietnamese communism is not controlled by either of them. The United States fight against the South Vietnamese Communists is relevant only to its relations with South Vietnam, which, even if she were governed by Communists, could not affect the balance of power in Asia.

It is to be held as an axiom, derived from the experience of many guerrilla wars, that a guerrilla war supported, or at least not actively opposed, by the indigenous population cannot be won, short of the physical destruction of that population. In the nature of things, the guerrilla is indistinguishable from the rest of the population, and in truth the very distinction is tenuous in a situation where the guerrilla is an organic element of the social structure.

In Vietnam, what makes "counter-insurgency" so futile an undertaking is the difference between the motivation of the guerrillas and that of the professional army fighting them. No professional army could have withstood the punishment Americans have inflicted on the South Vietnamese guerrillas since the beginning of 1965.

The United States government recognizes implicitly that there are two wars in South Vietnam—a military war and a political war—and that victory in the latter will be decisive. In order to win that political war, the United States has embarked on a massive program of political, social and economic reconstruction in South Vietnam. It is the purpose of that program to establish the government of South Vietnam as a new focus that will at-

tract the loyalties of the large mass of South Vietnamese who are indifferent to either side, as well as the disenchanted supporters of the Viet Cong. This program is up against three obstacles which, in the aggregate, appear insurmountable.

First, the government of South Vietnam is a military government and has remained so in spite of the democratic gloss which carefully circumscribed and managed elections have tried to put on it. The foundation of the government's power is the army, both in terms of the administrative structure and of what there is of loyal support. Yet the army is regarded by large masses of the population not as the expression of the popular will but as its enemy. This is so because of the oppressive behavior of the army toward the peasants and, more particularly, because there is reportedly no officer in the South Vietnamese army above the rank of lieutenant colonel who did not fight on the side of the French against his own people.

Second, this impression of an army fighting against its own people is reinforced by the massive presence of foreign armed forces without whom neither that army nor the government it supports could survive. Regardless of professed and actual American intention, the United States military presence, with its destructive economic, social and moral results in South Vietnam, appears to an ever-increasing number of South Vietnamese as an evil to be eliminated at any price.

Finally, the hoped-for radical change in political loyalties requires radical social, economic and political reforms, especially with regard to the distribution of land. The achievement of such reforms has indeed earned the Viet Cong the allegiance of large masses of peasants. Both in its composition and policies, the government of South Vietnam represents the interests of a small group of absentee land owners and members of the urban upper middle class who would lose their economic, social and political privileges were that government really trying to counter the social revolution of the Viet Cong with radical social reforms of its own.

The universally recognized weaknesses of the government of South Vietnam—corruption, inefficiency, apathy, lack of public spirit, low military performance, a staggering desertion rate—result irremediably from the nature of that government. They are not to be remedied by American appeals to the South Vietnamese government to do more for the country or to let the South Vietnamese army take over a larger share of the fighting and pacification. A government imposed on an unwilling or at best indifferent people by a foreign power to defend the status quo against a national and social revolution is by dint of its very nature precluded from doing what Americans expect it to do. That nature

dooms all efforts at politically effective reconstruction.

The third policy the United States is pursuing in Vietnam is the bombing of the North, to win the war in the South by interdicting the influx of men and material from the North, and to force the government of North Vietnam to the conference table by making it too costly for it to continue the war. Both purposes derive from a faulty perception of reality. The United States assumes that what it faces in South Vietnam is the result of foreign aggression and that there would be no unmanageable trouble in the South if only, in Secretary of State Dean Rusk's often repeated phrase, North Vietnam would leave her neighbor alone. It follows logically from this assumption that internal peace could be restored to South Vietnam if one could insulate South Vietnam from the North or compel the North to cease her assistance to the South. However, this assumption does not square with historic reality.

The roots of the trouble are in the South. They were deeply embedded in the nature of the Ngo Dinh Diem regime [1954-1963], which combined a fierce nationalism with a totalitarian defense of the economic and social status quo. Nobody doubts that the government of North Vietnam welcomed and aided and abetted the progressive disintegration of the Diem regime. But it did not cause it, nor was its support responsible for the Viet Cong's success. When, at the beginning of 1965, the government of South Vietnam was close to defeat at the hands of the Viet Cong, according to official estimates 90 percent of the Viet Cong weapons were of American origin and the annual infiltration from the North amounted to no more than a few thousand men, mostly of Southern origin. Only a total of a few hundred were regulars of the North Vietnamese army.

It is precisely because we have been unable to win the war in the South that we continue to assume that the source of the war is in the North and that victory can be won by bombing the North. However, the day is close at hand when everything that appears to be worth bombing will have been bombed and the war in the South will still not be won. The next logical step will be the invasion of North Vietnam; for if North Vietnam is responsible for the war, then the conquest of North Vietnam will end the war. While it will not accomplish that end, it will conjure up the likelihood of a United States military confrontation with the Soviet Union or China or both. The Soviet Union has assured the United States that it will not stand idly by while the government of North Vietnam is destroyed, and China has made it clear that she will intervene, as she did in the Korean War, when a hostile army approaches her frontiers.

However, if the war in the South lasts long enough, the United States has a good chance of winning it. The United States is not likely to win the war in the traditional way by breaking the enemy's will to resist, but rather by killing so many enemies that there is no one left to resist. Killing in war has traditionally been a means to a psychological end. In this war, killing becomes an end in itself. The physical elimination of the enemy and victory become synonymous. Hence, the "body count," however fictitious, is the sole measure of our success.

No civilized nation can wage such a war without suffering incalculable moral damage. This damage is particularly grave since the nation can realize no plausible military or political benefit which could justify this killing for killing's sake. And it is particularly painful for a nation like the United States—founded as a novel experiment in government, morally superior to those that preceded it—which has throughout its history thought of itself as performing a uniquely beneficial mission not only for itself but for all mankind.

Why, then, is the United States evidently resolved to continue fighting a war which appears politically aimless, militarily unpromising and morally dubious? The answer is to be found in the concern for American prestige. If the United States should leave Vietnam without having won a victory, so it is argued, the credibility of its commitments throughout the world would suffer, Communist revolutions throughout the world would be encouraged, and the reputation of American invincibility would be impaired.

Not only does the containment of Vietnamese communism not further the interests of the United States but, paradoxical as it may seem, it is even detrimental to those interests. The United States has a legitimate interest in the containment of China and its involvement in Vietnam is frequently explained in terms of this interest. But Vietnamese nationalism has been for a millenium a barrier to the expansion of Chinese power into Southeast Asia. There is no patriotic Vietnamese, North or South, Communist or non-Communist, Buddhist or Catholic, who does not regard China as the hereditary enemy of Vietnam. Yet to the degree that the United States weakens Vietnam as a national entity through the destruction of her human and material resources, it creates a political, military and social vacuum into which either the United States must move in virtual permanence or into

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—SEPTEMBER, 1981

Throughout the 1970's, the radically different world outlook of the Chinese leadership fueled the suspicions of United States policy makers, many of whom feared a monolithic Communist empire in China; however, this decade saw an evolution in United States relations with China and with Taiwan, which was discussed in this selection from a September, 1981, article by O. Edmund Clubb.

America's China Policy

BY O. EDMUND CLUBB
United States Foreign Service Officer (ret).

It has been a full decade since Republican President Richard M. Nixon undertook to re-establish official ties with the People's Republic of China (PRC); and it is over two years since Democratic President Jimmy Carter granted formal recognition to the Beijing regime—and simultaneously broke off diplomatic relations with the Chinese Nationalist “Republic of China” (ROC) on Taiwan, in December, 1978. [In 1981,] after an election campaign in which (as in 1952) “the China Question” was an issue (if, this time, a minor one), it seems timely to assess the American China policy, as related to both China and Taiwan, and in the context of other forces in East Asia.

In one respect, there is a striking contrast in the operation of the foreign policies [of the United States and China]; in contemporary China there have been frequent radical shifts of policy, reflecting changing Chinese estimates of where the greatest gain may be achieved; in the United States, contrariwise, foreign policy decisions in the cold war era have all too often been made on the basis of domestic considerations and, once made, have tended to become hard “commitments” that drag on well past their natural term.

These features became glaringly evident in the development of Sino-American relations soon after the end of World War II. The Pacific War had been waged with the United States committed to support Generalissimo Chiang Kai-shek's Chinese Nationalist regime against Japan, and it ended with Washington hopeful that the Chinese Nationalists and the Chinese Communist faction led by Mao Zedong would be able to resolve their political differences to end China's civil war. But with the failure of American attempts at mediation,* the war between the Nationalists and Communists was resumed. American leaders then faced a policy decision. Should the United States continue an

unbending support of the failing Nationalists, or should they adopt a more flexible attitude because of the possibility that the revolutionary Chinese Communist forces might prove successful? In 1947, the cold war between the United States and the Soviet Union began; and in China, American policy began to take a more pronounced tilt toward the Nationalists.

But even as late as 1949, when the Communist victory over the Nationalists had become practically certain, the die was not yet cast. Outwardly, the Communists manifested strong hostility toward the United States, but they were sufficiently “Chinese” to want to avoid subordination to any one other power, however close superficially in ideology. And they knew that the Soviet economy was weak after four years of fighting the Germans; thus they understood the desirability of obtaining economic aid from the United States, if possible, as well as from the U.S.S.R. On June 1, 1949, Chinese Premier Zhou Enlai sent an indirect message to a United States government representative in Beijing expressing the Chinese Communist desire to have political and economic relations with the United States as well as with the Soviet Union. The United States endeavored to put its response into more direct channels, and the move was aborted. On June 30, Chairman Mao Zedong issued his critical “leaning-to-one-side” statement; since China could not expect aid from the “imperialist” powers, it would lean to the side of the Soviet Union.

Still, when the new Central People's government was formally established in Beijing on October 1, it invited the United States, like other countries, to enter into formal diplomatic relations. But pro-Nationalist sentiment still ran strong in United States government circles, and especially in the Congress, and the administration delayed action on the recognition issue. By the end of April, 1950, all remaining diplomatic and consular personnel had been withdrawn from China, and for the first time

*President Harry Truman sent General George Marshall to China in 1946 to mediate the Communist-Nationalist dispute.

in over a century the United States was left without diplomatic ties there.

The field had thus been left to the Soviet Union. In the meantime, after long negotiations in Moscow, Mao had succeeded in negotiating a treaty directed against Japan and any country allied with it. (That treaty was allowed to expire in April, 1980, after the granting of American recognition.) With Washington viewing the People's Republic as a willing Soviet lackey, the Sino-American cold war began in earnest. The Korean War broke out in June, 1950; the United States intervened promptly on the side of President Syngman Rhee's South Korea to contain "world communism," and in October the Chinese intervened on the side of North Korea. Subsequently, in May, 1951, an American military mission visited Taiwan for the purpose of launching a program to rebuild Nationalist military capabilities, although Washington had earlier been resigned to the eventual Communist conquest of the island after Chiang Kai-shek fled there with his defeated Nationalists. By terms of the peace treaty signed with Japan in September, 1951, Taiwan was detached from the Japanese empire but was left with its ultimate legal status undetermined: "China" did not recover the sovereignty it had lost over the island in 1895.

The Korean War was halted by the truce agreement of July, 1953. In November, 1953, Chiang Kai-shek and Syngman Rhee joined in a communiqué calling upon the "free" countries of Asia to create a united anti-Communist front and asking other "freedom-loving nations" to support that front. And indeed about a year afterward, in late 1954, President Dwight Eisenhower entered into a mutual defense pact with Chiang's regime which, ratified in March, 1955 (during the first "Formosa Strait crisis"), committed the United States to the defense of Taiwan and the Pescadores. The treaty was abrogated by President Carter's action of December 15, 1978.

With the development of other American ties to Japan, South Korea and the Philippines, the PRC was effectively "contained" in the West Pacific. The second "Formosa Strait crisis" erupted in 1958, whereupon the United States dispatched naval and air forces to the region to bolster the Chinese Nationalists. The break in Sino-Soviet relations, bringing the withdrawal of Soviet advisers and economic assistance from the People's Republic, occurred in 1960. Nonetheless the United States, riveted to its self-assigned mission of containing Chinese communism, in 1961 began a fresh intervention in a new sector bordering on China; and that misguided venture expanded into the Vietnam War. The United States waged that war until 1973, and withdrew, defeated; in 1975, North Vietnam

took over South Vietnam. And the People's Republic of China and the Soviet Union, in their separate "Communist" ways, had both supported the North.

In the meantime, in the summer of 1969, another American Republican President, Richard Nixon, had proclaimed the so-called Nixon Doctrine, proposing in effect that although the United States was determined to maintain its power position in Asia there would be no extension of the Vietnam War. In short, Asians should fight Asians.

President Nixon made his historic journey to Beijing in February, 1972, and the joint communiqué issued in Shanghai at the end of the President's visit on February 27 marked the real beginning of Sino-American rapprochement.

Taiwan was an issue on which Beijing would accept no compromise; and the sentiment among Nationalist supporters in the United States—and particularly in the United States Congress—was so strong that American acceptance of those conditions could be expected to create a furor.

Even as the 1971 Kissinger trip to Beijing had been made without prior consultation with Taipei (not to mention Tokyo, Seoul or Manila), so too was President Jimmy Carter's move of December, 1978, recognizing Beijing. In fact, not even Congress was consulted in advance with regard to the projected shift in the American China policy. The Taiwan question was subsequently given a peculiarly American definition by the Taiwan Relations Act of April, 1979.

The United States would continue to provide Taiwan with "arms of a defensive character"; and; in the event of a threat to the security of the people of Taiwan "and any danger to the interests of the United States arising therefrom," the United States would take appropriate action. The American commitment to Taiwan had actually been expanded.

By an agreement signed in Washington, D.C., on October 2, 1980, the American Institute in Taiwan (Republic of China, ROC) and the Taiwan Coordination Council for North American Affairs effectively granted traditional diplomatic privileges and immunities to officials of the two bodies. Through a commentator's article in the *People's Daily*, Beijing protested what was in effect a partial adoption of the Reagan position; but the State Department described the protest as routine and said that there was no danger to the growing ties between the two countries. And indeed on October 22, in Beijing, United States Ambassador to China

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—NOVEMBER, 1983

United States policy toward Japan changed markedly after 1978, as Japan became a global economic competitor. In this selection from an article that appeared in November, 1983, David Denoon pointed out that "the political side of the United States-Japanese relationship is strong. Comparable views . . . make relaxed political discussions the rule."

Japan and the U.S.—The Security Agenda

BY DAVID B.H. DENOON

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ALTHOUGH there has been no single, dramatic turning point, there has been a major change in United States-Japanese interaction since 1978. In 1978, President Jimmy Carter's Far East policy focused on the normalization of relations with the People's Republic of China (PRC) and disengagement from Taiwan. Despite efforts by Secretary of State Cyrus Vance to develop a smooth working atmosphere with the Soviet Union, Carter administration talks with Moscow were never relaxed; this gave United States National Security Adviser Zbigniew Brzezinski room to pursue an entente with China. Few observers anticipated that President Carter would recognize China as soon as he did (January 1, 1979), but it was clear that the last two Carter years were spent courting China as a counterweight to the Soviet military buildup in the Far East. The Carter administration's discussions with Japan mainly focused on trade questions and neither side showed any particular desire for a change.

By 1983, the situation was fundamentally different. The rapid deployment of Soviet Backfire bombers and SS-20 intermediate-range nuclear missiles made a deep impression on the Japanese public; and this proximate threat combined with the second oil shock of 1979-1980 and the Soviet invasion of Afghanistan heightened Japan's sense of vulnerability. The September 1, 1983, attack by a Soviet fighter on a South Korean civilian airliner that had strayed into Soviet airspace caused further fears in Japan, and reduced prospects for improved Soviet-Japanese relations.* All this led Japanese political leaders to concentrate on security policy.

The 1978-1983 period has also produced some fundamental changes in United States perceptions. National Security Adviser Brzezinski's talk of "playing the China card" was basically an extension, albeit a crude one, of Secretary of State Henry Kiss-

inger's view that the global power balance was a triangular structure: the United States and the U.S.S.R. were the main protagonists, with China as the swing factor.

Nevertheless, by 1980 the triangular construct was dated. Close United States-Chinese relations may have played a part in facilitating SALT I (Strategic Arms Limitation Treaty) negotiations, but they failed to inhibit the Soviet Union in its support of Libya, Angola, Ethiopia, Southern Yemen, Cuba and Nicaragua; and both the United States and China had been blithely ignored as Soviet troops invaded and occupied Afghanistan. Despite his campaign promises to cut the defense budget by 5 percent, President Carter dramatically expanded United States military commitments in January, 1980. He explicitly stated that the Persian Gulf was an area of vital interest to the United States (the Carter Doctrine) and proposed a sizable real increase in defense spending for fiscal 1981.

As the Carter presidency drew to a close, many Japanese wondered whether the United States could and would honor its commitments to defend Japan. Since the United States-Japanese Mutual Security Treaty is the cornerstone of Japanese defense arrangements, the governing Liberal Democratic party (LDP) is judged by how well it maintains American protection. Therefore, it was the curious combination of perceived American weakness and the election of a President committed to a rapid modernization and expansion of United States military strength that laid the basis for a transformation of the United States-Japanese security relationship.

A comparable reevaluation was taking place in Washington. The Reagan administration's initial move to enhance its position in northeast Asia was Secretary of State Alexander Haig's offer of weapons to the Chinese. Yet by 1982, once George Shultz replaced Haig, United States attention increasingly turned to Japan. Not only was it galling to Americans to see how little the Japanese were ac-

*The airline disaster also revealed that there is now close Japanese-American intelligence cooperation.

tually spending on defense, but there was growing recognition that China's modernization was proceeding at a very slow pace and that the Japanese represented a more promising ally. Although the Reagan administration consistently urged Japan to expand defense expenditures, it was only after the rise of Prime Minister Yasuhiro Nakasone and the more cautious judgment of China's likely performance that the United States began to value its links to Tokyo more than those to Beijing.

Economic competition has been the main source of tension between Japan and the United States in the last 15 years. President Nixon ran for office in 1968 pledging to reduce unfair Japanese textile imports; debates about the legitimacy of Japanese industrial policy and trading practices have been a staple ever since.

The most vexing current trade issues concern Japanese limits on citrus and beef imports. United States suppliers see this as an extremely promising market, and the United States has given formal notice that it will invoke General Agreement on Tariffs and Trade (GATT) retaliatory measures unless the Japanese permit substantially greater citrus and beef imports by August, 1984. This is a difficult issue for the LDP because its most steadfast constituency is in the farming community and greater citrus and beef imports will hurt its prime supporters.

Designing an appropriate Japanese role on the world scene has been a point of controversy ever since the Meiji Revolution in 1868. The original decision to end two centuries of isolation forced a series of choices on such issues as how many foreigners to have in Japan? what technology to import? what military force structure and alliances are prudent? how should access be gained to necessary raw materials and energy for a resource-scarce nation? China's inability to defend itself and its failure to modernize became a negative example, but the Japanese never did settle on a security policy that was both unobtrusive and independent. There has been a tendency to oscillate between a deep feeling of dependence (*amae*) and the supernationalistic view of Japan as the exceptional state (*tokushu kokka*).

Since 1945, however, Japanese security has been inextricably linked with United States protection. The Mutual Security and Cooperation Treaty first signed in 1952 gave the United States virtually unlimited access to bases in Japan but, conversely, required little commitment from the Japanese to their patron. In the early 1950's Tokyo saw itself as weak economically and had little difficulty in deciding to concentrate on economic performance. Given United States nuclear superiority, neither the Soviet Union nor China posed a plausible threat.

Between 1960 and 1976, there was remarkably little change in Japanese security policy. This was the period of the "economic miracle" and the time when French President Charles de Gaulle called Prime Minister [Hayato] Ikeda merely a "transistor salesman." However, the Nixon Doctrine, the Shanghai Communiqué, the Arab oil embargo, the OPEC oil price increases and the United States withdrawal from Vietnam all forced a reassessment.

In this setting, the 1976 National Defense Program Outline (NDPO) was released. It called for keeping the Ground Self Defense Forces at 180,000 men but upgrading their armor, mobility and surface-to-air weapons; the total size of the air forces would not grow above 400 planes but would be significantly upgraded through the addition of American F-15's and F-16's. Major changes were proposed for the Marine Self Defense Forces, where operational aircraft would almost double to 220 planes, antisubmarine warfare ships would expand to 60, and submarines would be increased to 16. The Mid-Term Defense Program Estimate in 1981 reaffirmed, with a few modest changes, the 1976 plan for the Japanese military.

The second significant modification of Japanese defense policy came after additional shocks: the fall of the Shah of Iran, the Iran-Iraq War, and the Soviet conquest of Afghanistan. These events so near the Persian Gulf (the source of 70 percent of Japan's oil), combined with the build-up of a 10,000-man Soviet garrison in the northern Kurile Islands and the deployment of approximately 100 SS-20's and 90 Backfire bombers in the Far East, dramatically changed the military balance in northeast Asia. Japan's key energy source was at risk; and the greater range and improved accuracy of the SS-20's and the Backfires mean that all Japan's major population centers and principal military targets could be simultaneously threatened.

The political side of United States-Japanese relations is strong. Comparable views about South Korea, China, the Association of Southeast Asian Nations (ASEAN) and the Soviet Union make relaxed political discussions the rule. Economic issues could conceivably grow more rancorous if Japan does not change its industrial policy, and if productivity and investment do not increase significantly in the United States. Yet if the current American economic recovery proceeds, domestic employment in the United States should improve and sentiment

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—OCTOBER, 1984

In the 1980's, the cold war was most sharply defined in Central America, where the administration of United States President Ronald Reagan chose to oppose the Soviet Union as well as the government of Nicaragua. In this selection from an article that appeared in October, 1984, Robert Leiken pointed out that "Soviet authorities have frequently intimated . . . that the 'Nicaraguan problem' can be resolved only in the context of United States-Soviet relations."

The Soviet Union and Nicaragua

BY ROBERT S. LEIKEN

Senior Associate, Carnegie Endowment for International Peace

To gather support for its programs, the administration of President Ronald Reagan has depicted a cohesive, expansionist "Moscow-Havana-Managua axis." Administration opponents, on the other hand, cling to the image of a nationalist, nonaligned Nicaragua, whose conspicuous ties with Moscow have been thrust upon it. The terms of the American dispute over relations between the Soviet Union and the Sandinista government have been set by the exigencies and limitations of American politics.

The discrepancy between Moscow's optimism and assertiveness in Central America in 1979-1980 and its cautiousness and retrenchment beginning in 1981 is understandable, for in those years both the global and regional "correlation of forces," to use Moscow's idiom, had shifted to the Soviet Union's disadvantage.

Between 1965 and 1979, the Soviet Union had achieved rough nuclear parity with the United States and widened its conventional advantages. The Soviet development of a blue water navy and a capacity to air- and sealift troops and equipment, combined with the repudiation of United States intervention in the third world, enabled the Soviet Union to form a more effective "natural alliance" with many third world national liberation movements.

During this period, Soviet tactics underwent major innovations. Moscow declared that "political-military fronts" modeled on the July 26th movement could play the role previously reserved for vanguard Marxist-Leninist parties. Economic ties with the Soviet bloc were no longer considered the main factor for the "non-capitalist road of development." In the mid-1970's the fundamental factor had become the "political, military, strategic and moral influence of the states of the Socialist community."

This shift reflected the widening gap between Soviet economic weakness and military strength.

Accordingly, in dealing with countries like Angola and Ethiopia and later Nicaragua, Moscow recommended the preservation of mixed economies and economic ties with the West. At the same time, the Russians sought overwhelming influence in the military, security and intelligence spheres. Soviet analysts argued that Soviet bloc military aid had become indispensable to third world national liberation and sovereignty and that Soviet gains in the third world were the specific results of the "changed correlation of forces on a world scale."

A division of labor among Soviet bloc countries emerged. Typically, the Soviet Union and Czechoslovakia provided military equipment; Cuba, troops and, along with East Germany, military advisers; East Germany, assistance in internal security; Bulgaria, economic advisers; and so forth. The host country frequently furnished facilities or bases for Soviet naval and air forces as well as sanctuaries for certain approved liberation movements. The pro-Soviet third world regimes were sometimes granted "friendship treaties" but never defense guarantees.

By 1980, the guerrilla struggles against the occupation of Kampuchea and Afghanistan and in Eritrea, Tigre, the Ogaden and Angola; the challenge of Solidarity; the economic difficulties of Cuba and Vietnam; political friction with third world allies like Ethiopia and Angola; the distancing of significant nonaligned countries like Iraq and Algeria; NATO's (the North Atlantic Treaty Organization) resolve to deploy Pershing and cruise missiles; and the United States rejection of SALT II were darkening Moscow's international panorama. Muslims and other Arabs were alienated by the invasion of Afghanistan, the abandonment of Somalia, and the betrayal of Eritrean Muslims. The Shah fell, but the Ayatollah Ruhollah Khomeini's regime became openly anti-Soviet. Prime Minister Robert Mugabe's Zimbabwe kept Moscow at a distance and frustrated its hopes of a Soviet-oriented

southern African bloc. Increasing United States-China-NATO cooperation and the Chinese call for "parallel actions against Soviet hegemonism" raised the specter of a worldwide "anti-hegemonist united front."

In 1982, an article in the important Soviet journal *Problems of Philosophy* stated bluntly that the Soviet economy no longer was a source of inspiration for the third world. Recently liberated third world countries and others like India, Iraq and Algeria with long histories of economic relations with the Soviet Union now looked to the West for trade and aid. On many sides, the "natural alliance" between Moscow and the third world was fraying. Third world "united action" against United States imperialism was beset by ethnic and factional strife. Guerrilla insurgencies began to target Moscow's friends in Ethiopia, Afghanistan, Angola, Mozambique and Nicaragua.

At the same time, the policies of the Reagan administration were enforcing Soviet discretion. Indeed, the Soviet shift to defensive tactics was facilitated by the nuclear rhetoric and the third world policies of the Reagan administration. Taking a cue from Stalin's United Front against Fascism, which targeted Nazi Germany as the main enemy, Moscow sought to organize a "United Front against [United States] Imperialism." Soviet propaganda focused on President Reagan's belligerency. Armed revolutionary struggle yielded pride of place to broad alliances against United States-supported regimes and United States "hegemonism." Moscow sought to mend fences with the Chinese and to woo the European peace movement.

In the 1980's, Moscow has evaded new third world commitments. Instead of new military facilities or clients, it has sought to consolidate and defend "the gains of socialism" in Ethiopia, Angola, Mozambique, Syria, Vietnam, Kampuchea, Laos, Cuba and Nicaragua. Soviet arms transfers to the third world declined slowly after 1979 and dropped sharply in 1983. In integrating its third world clients into an extended Soviet empire, Moscow no longer urges them to imitate Soviet-style rapid industrialization but advocates the preservation of agrarian economies as part of a "socialist international division of labor" resembling closely the traditional North-South system Moscow routinely denounces elsewhere.

Soviet optimism toward Central America reached a peak in the winter of 1980-1981. In November, 1980, for the first time, Central America was mentioned as a region where "socialist-oriented" states were emerging—in an article in the official Soviet Communist party organ *Kommunist* by Boris Ponomarev, the leading Soviet

Central Committee authority on the third world. Both *Pravda* and Tass featured triumphal reports on the Salvadoran guerrillas' final offensive.

In retrospect, however, the failure of that offensive appears to have occasioned another reassessment of Moscow's Central American policy. After the defeat of the final offensive, optimism disappeared from the Soviet bloc media and a curtain descended on El Salvador.

Soviet bloc arms transfers to El Salvador's guerrillas fell off sharply after the final offensive. Nicaragua has continued the flow of ammunition and medicine, but even United States administration documents acknowledge that weapons flow has become "sporadic."

Following patterns established elsewhere in the third world, Moscow has cautiously but steadily consolidated "socialist gains" in Nicaragua. Paradoxically, the Soviet "penetration" of Nicaragua has been promoted more eagerly by the FSLN than by the Kremlin. Sandinista leaders shuttle regularly to Moscow, though no Soviet leader has visited Managua.

Despite the Sandinista efforts, the Kremlin has been exceedingly chary. Soviet economic aid oscillated between \$75 million and \$150 million between 1981 and 1984. Soviet bloc aid totaled between \$200 million and \$250 million in 1983. Most observers regard this level as strikingly low in light of the continuing deterioration of the Nicaraguan economy.

The Soviet bloc takes a little more than ten percent of total Nicaraguan imports and exports, trailing the United States, the European Economic Community countries, Central America and the rest of Latin America. Although the Soviet bloc purchases moderate amounts of traditional Nicaraguan exports, it has not become Nicaragua's primary client as it is in Argentina and Cuba. While in September, 1983, Nicaragua was admitted as an observer to the CMEA, diplomatic sources report that Nicaraguan petitions for full membership have been rejected. Plans are afoot for a joint CMEA-Nicaraguan working commission for cooperation in economic planning, cadre training, agriculture, forestry, textiles and mining, but Tass excluded Nicaragua from a list of "developing states of socialist orientation" with whom cooperation through CMEA "is most intensively developing."

Soviet deliveries of military equipment to Nicaragua have increased substantially since 1981.

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—FEBRUARY, 1987

During the Reagan administration, the United States abandoned its once active policies in the volatile Middle East; for its part, the Soviet Union also softened its approach to the area. In this selection from an article that appeared in February, 1987, Robert Hunter noted: "By abstaining from its expected role, the United States has neither removed itself from danger nor increased the security of its interests."

The Reagan Administration and the Middle East

BY ROBERT E. HUNTER

Senior Fellow, Center for Strategic and International Studies

It may seem surprising that the Reagan administration has seldom been deeply engaged in Arab-Israeli peacemaking, and never to the degree of its recent predecessors. There are many explanations. Opportunities within the region have rarely seemed promising to policymakers in Washington. Peacemaking is time-consuming, and the peace process has often proved to be the graveyard of political ambitions.

But there is a deeper reason for United States abstention from its traditional peacemaking role: the 1979 Egyptian-Israeli peace treaty. Because it reduced the risks of major Arab-Israeli conflict and United States-Soviet confrontation, the 1979 peace treaty also seemed to reduce the Reagan administration's need to try to negotiate peace.

More critical are basic questions about the tractability of conflict. As time passes, there is less optimism that the Arab-Israeli conflict can be resolved peacefully. A younger generation of Palestinians is even more radical than its elders. Israel's population is shifting against the belief that Israel may be able to compromise to gain legitimacy in the Middle East. Modernization, unemployment, religious fundamentalism—these factors add to doubt that a peace process can be revived at American will.

At its outset, the Reagan administration tried to look beyond the challenges of the Arab-Israeli conflict that, sooner or later, had daunted each preceding administration. Under Secretary of State Alexander Haig, the administration tried to put the Middle East in a broader context, a "strategic consensus" of regional states against a Soviet advance.

In terms of broader United States-Soviet relations, there was much to be said for this approach. After the 1973 Arab-Israeli war, Egypt's President Anwar Sadat had begun his overtures to the United States as the only country that could change the po-

litical stalemate between Egypt and Israel. Soviet influence began to shrink. By 1981, therefore, there was at least superficial logic in Haig's effort to enlist regional powers against the Soviet Union. His effort also seemed a logical corollary of the Carter—now Reagan—Doctrine.*

Nevertheless, the states of the region divided on "strategic consensus." For Egypt and Israel, the concept was made to order. Not only were there ideological sympathies—Egypt had broken with the Soviet Union, and Israel had long benefited from East-West polarization in the region—but both countries wanted to become part of the new United States strategic preoccupation with the Persian Gulf. It was no coincidence that Egypt had cooperated in the United States effort to rescue hostages in Teheran, was prepared to provide base access to United States forces, and had joined in military exercises. Nor was it coincidence that Israel reversed its long-standing position against allowing United States forces to take part in its defense.

Neither Jordan nor Saudi Arabia embraced the concept of strategic consensus. Both were bemused by the United States emphasis on the Soviet threat and both saw opportunities that were not consonant with their own concerns. Strategic consensus, they declared, must be an adjunct to decisive change in Israel's position in Jerusalem and the West Bank. By their lights—with Soviet power remote and United States preoccupations largely irrelevant—they were right. Thus the United States effort to fold the Middle East into a global strategic environment was stillborn.

For reasons that had less to do with strategic interests than with political habit, the United States undertook to help bring about the withdrawal of

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*Editor's note: After the Soviet invasion of Afghanistan in 1979, President Jimmy Carter declared the United States would use force to protect its interest in the Persian gulf.

Robert E. Hunter served as director of Middle East affairs (1979–1981) at the National Security Council under President Jimmy Carter.

TECHNOLOGY

(Continued from page 8)

the massiveness of physical power, on the ability to exert force at a distance and all but instantaneously, on the complexity of weapons and decision-making, on capabilities for surveillance, and on others are all now familiar. These in turn have led to major changes in the international political system: altering the meaning of resort to war, leading to the emergence of two competing nations dominating the global scene, and modifying the significance of many traditional geopolitical factors such as geography, forces in being, mobilization potential, population size, resource base, and others.

The importance of technological change for security affairs gives every sign of continuing in the future, though the most important effects on international relations may lie only marginally in the direct impact on military weapons and hardware. As before in this analysis, the effects of general technological trends will be explored, rather than the impact of specific technological developments.

• Reducing Differences among States

In the perspective of the next decade or two, one of the more important effects of technology on weapons will be the diffusion of physical power to more and smaller countries. One possible route for that diffusion of power is proliferation of nuclear weapons. Though it is taking place at a slower pace than widely feared a decade ago, it is now possible for a substantial number of countries to master the technology and to obtain the necessary fissionable resources.

Other factors than technology will determine whether any additional nations actually acquire nuclear weapons, but proliferation, or the evident possibility of proliferation, is likely to bedevil international relations for a long time to come. That prospect could serve to unite the superpowers in common policies, as it has in the past, or it could create serious conflicts and strains.

Another route for the diffusion of power is the continuing development of conventional weapons with increased firepower, greater accuracy, longer range, higher mobility, and greater cost effectiveness. These weapons have not yet had as much R&D attention as more glamorous nuclear weapons, but even developments to date have the capability to alter the calculus of the non-nuclear battlefield. For example, stand-off offensive weapons; the families of weapons designed to destroy tanks, ships, aircraft and personnel; electronic battle control; and new capabilities for surveillance are gradually changing the characteristics, and the danger, of local war. The actual results of the

changes are not precisely predictable; for example, Iraqi superior equipment has not been able to overcome Iranian zeal and scale of manpower, nor has Soviet technology been able to overcome local resistance in Afghanistan as the U.S. was also unable to do in Vietnam. Single missiles sank capital ships in the Falklands, and anti-aircraft missiles have severely modified operations requiring air cover in the Middle East.

Last, the diffusion of physical power clearly will extend to nonstate actors as well. The appearance on the arms market of new forms of easily transported high-power explosives and of formerly heavy and bulky long-range equipment that can now be carried by one man (such as anti-aircraft weapons) makes this certain. An upsurge of resistance movements or of terrorism, made more dangerous by high-technology weapons, could become a factor in international relations, through, for example, the destabilization of trouble spots in which one or another superpower was heavily engaged.

• Technology as Savior: SDI

The dramatic changes that have been wrought by rapid, and seemingly limitless, development of science and technology naturally have given rise to a belief that those fields can, under the right conditions, solve all problems. Experience, sometimes bitter, has shown how misplaced is that view. All real policy problems are as much (or more) non-technical in nature as they are determined by science and technology. Even when a problem appears to be purely technical, science and technology can be only part of its resolution because of the relevance of nontechnical factors at every stage of the R&D and application process.

The world has been treated in the last few years to a throwback to the more innocent past. Science and technology have suddenly been put forward as capable of solving the threat of nuclear war by creating a missile defense system that would make nuclear missiles impotent. The Strategic Defense Initiative (SDI) is a search for a technical fix to a situation that simply cannot be solved by technology alone. Even if some of the more exotic technologies visualized were to prove "feasible," the idea of creating a system of the cost and complexity contemplated that could never be demonstrated as a system on its own or against countermeasures, and that would have to exist in an ever-changing, ever-threatening technological environment, is simply not technological or political reality. Moreover, the information-handling and decision requirements of the system, even if soluble, would require response decisions in three minutes or less. It is difficult to imagine the political process in the United States resulting in a decision to accept a system carrying

the distinct danger of initiating nuclear war without human intervention.

The weakness of the case has not prevented the commitment of substantial funds and the active promotion of the promise of SDI. Other motives are obviously at work on the part of many of its advocates. But whatever the motives, one can hazard the prediction today that the full conception of SDI will not for much longer be a serious objective. The current attempt to commit the United States to an early deployment decision is an act of desperation, not a recognition of accomplishment. Congress is unlikely to agree to deployment, or to vote the scale of R&D funds requested for the program. Attempts to reinterpret the ABM (Antiballistic Missile) treaty, as SDI testing would require, are likely to be resisted by Congress.

The goals of SDI may be cut back, but defensive technologies will continue to be explored by both sides, and will be a factor in future negotiations. Some form of ABM defense, probably ground-based, could in fact be a useful adjunct to agreed reductions in offensive arms.

The Soviet Union, for reasons of its own, has chosen to take very seriously the threat of SDI, perhaps because of the resource commitments required to hedge against uncertainty, and because of concern over the increased stimulation of innovative American science and technology. But the focus on SDI is likely to fade in the next few years as the United States moves away from a strong political commitment to it. Technological developments will continue, as in the recent past, to be incremental, to occur steadily but without causing strategic surprise, and to be roughly symmetrical over time in their effects on the strategic balance between the United States and the Soviet Union.

• R&D, Security and Arms Control

The funds devoted to R&D worldwide have reached astonishing proportions. No accurate tabulation is available, but a rough calculation would indicate a total of some \$400 billion per year.⁶ Of that amount, a reasonable estimate, possibly conservative, is that one-third is motivated directly or indirectly by military-security concerns. The scale of this commitment of resources is all the more striking when it is realized that in the United States in 1940, federal funds for defense R&D were \$26.4 million, second to agriculture at \$29.1 million.⁷ Science and technology have become central aspects of national

⁶Assuming roughly equal amounts in the U.S. and the Soviet Union, totaling approximately \$240 billion, some \$70 billion in Western Europe, \$40-billion plus in the rest of the world.

⁷Nathan Rosenberg, "Civilian Spillovers from Military R&D Spending: The American Experience Since World War II," Center for Economic Policy Research, Stanford University, September, 1986.

security concerns for nations of both East and West, and in a surprisingly short time.

The fact that such a large proportion of the world's scientific and technological resources are devoted directly to national security, with much of the rest also contributing, means that the technological environment will never be static. There will be new capabilities, and frequent surprises, emerging from the laboratory or from industry. The current unexpected discovery of materials that are superconductive at higher temperatures than previously thought possible is an excellent example. That discovery will have many applications, including potentially important military applications. Other developments in fast-moving fields such as biotechnology are sure to have possible military uses as well.

But these developments must be kept in perspective. They are effectively available, with only brief delays, to all sides. Moreover, there is no reason to expect that technical-military advances in any field visible today cannot be largely offset by parallel developments in countermeasures. This is particularly relevant to strategic systems of East and West, which, in effect, form one large interactive system, with substantial inertia and little sensitivity to incremental change. New technological developments, even entirely new capabilities are not likely to perturb the basic balance of the system to the end of the century at least, and probably well beyond.

The effects of new technological developments in the conventional arena could, however, be much more important, contributing, among other effects, to the trend noted above of making possible the diffusion of power to more and smaller states.

Large and sudden surprises with strategic effects remain extremely unlikely, but steady evolution of capabilities is certain. The details may be arguable, but the overall thrust is not. In effect, the results of science and technology will be constantly modifying the parameters of security relationships. The increasing number of countries with serious scientific and technological capabilities will in turn greatly complicate those relationships. Change, paradoxically, becomes a constant. All nations will be faced with this reality as they work with or confront each other in their myriad security relationships.

Scientific and technological capability is now a major ingredient of the relative power of states. But how is it to be measured? How important are perceptions of scientific and technological competence when so much of the determination of relative military capability is itself a matter of perception? There can be no definitive answer. It is clear, however, that states will have to be as concerned with public awareness of scientific and technological strength, as they are with any other aspect

of their military posture. Both the Soviet Union and the United States appear to understand this today, with the perception of the lead held by the United States in science and technology partly reflected in the Soviet Union's extraordinary reaction to SDI. Any change in perception would have important effects on the climate of their relationship, as Sputnik had in the late 1950's.

A corollary of constant change through R&D is that R&D is always destined to be "subversive" of arms control agreements. That does not mean that such agreements cannot be in the security interests of states, or that R&D is not also important for development of the technology needed for implementation of arms control agreements. It simply means that negotiations have to be conducted in the knowledge that continued R&D is likely over time to change the elements and significance of an agreement, possibly leading to technology that makes an agreement obsolete. Especially is this so because nations will tend to focus research and development on weapons options that are not prohibited by arms control agreements.

Some agreements may attempt to control the significance of continued R&D, for example by prohibiting testing, but as the current dispute over the ABM treaty shows, new technical possibilities may lead to new interpretations. Agreements designed to ban R&D directly are not desirable, and would be exceedingly hard to enforce, or even to visualize. Over the next decades, therefore, R&D itself is not likely to be a direct focus of arms control negotiations, though it may be influenced by agreements on downstream technology. R&D will continue to be a factor that leads to evolution of the meaning of agreements after they are reached, and that leads to new capabilities requiring new methods of control.

• New Powers

The role of technology as a critical factor in both the economic and military strength of nations raises the question of the emergence of new powers on the international scene, strong enough to affect international relations over the next few decades. There are, in fact, several candidates. Japan stands out, obviously, as a technological-economic power that may possibly become a power in military terms as well. The United States has been pressing Japan to commit more funds to its military establishment, and to take more of a role in Asian defense. That nation has the human, economic and intellectual resources to play a larger strategic role; sooner or later it will, especially if trade relations with the United States seriously worsen, leading the United States to pull back its security guarantee.

⁸Dwight H. Perkins, *China, Asia's Next Economic Giant?* (Seattle: University of Washington Press, 1986).

China also may be poised on the edge of an economic takeoff similar to its Asian neighbor twenty years ago.⁸ When that colossal and talented country does acquire modern technological capability on a nationwide scale it will certainly enter the lists as a major factor in world security affairs, and eventually as a superpower. That latter capability may still be some time off, but barring a return to the internal chaos of the 1960's, China's influence in economic and strategic matters is likely to grow steadily in the near future.

Other candidates are in the category commonly called Newly Industrializing Countries today. Brazil, South Korea and India are examples. None are likely to become major factors on the strategic stage unless they become embroiled in dangerous local conflict, but all are likely to be important economically and technologically, with the potential for eventual substantial military significance.

TECHNOLOGICAL CHANGE, POLICY PROCESSES AND INSTITUTIONS

In considering the impact of technological change on international politics in general and international relations in particular, it is easy to neglect the likely changes in policy processes and institutions, both domestic and international. Those changes will be of great importance in the future, as they have been in the past, not only in establishing the framework in which relations will be considered, but also in defining the bounds of possible policies.

• Public Involvement

In the West, technology has been an important factor in leading to much greater openness in the policy process. Communications and transportation technologies have made possible not only much more rapid dissemination of events as they happen, but have also made intervention in the political process more feasible. Particularly in the United States where there are so many points of leverage in the political system, this development has led to more organized public pressure on officials in a wide variety of policy areas, including foreign affairs, and greater sense of public concern for and involvement in policy formation. The down side of the picture is that this higher level of participation has also contributed to fragmentation and blockage of the policy process. An effective leader can use these same technologies to mobilize public opinion for a particular course of action, as President Reagan was able to do for a time. The frustrations he experienced, however, growing in part out of the open policy process, also led to the incredible decision to bypass the formal process in dealing with Iran and the contras of Nicaragua.

• Technology and Policy

With the role of technology in international relations and world affairs outlined here, it is obvious that there must be extensive technological input in the formulation of foreign policy. Obvious it may be, but easy it is not. A major part of the problem is the point made repeatedly that it is never technology alone that is the issue, but the interaction of technology with the other elements of policy, including the politics of the policy process itself. Thus to represent the technological inputs adequately requires being able to mesh those factors with the many other non-technical aspects, to see their interaction, and how they affect and modify each other. That is not a task for a typical scientist or engineer, nor, for a typical foreign policy official.

Other difficulties stem from the inaccessibility of many technological issues to those without technical training and even to many with it, the confusion over how to deal with scientific uncertainty, the danger of reliance on experts, and the difficulty of dealing with often esoteric science-based methodologies used increasingly to analyze policy issues. It is made even more difficult by the international misuse of technological information, sometimes as a mask for ideological or bureaucratic goals, and by the tendency to imagine that technology can be used as a fix to solve a political problem.

Better capacity for dealing with the technology-foreign policy interaction is needed in all governments. In the United States, it has been a perceived need for many years, with only sporadic progress in correcting the deficiencies. Presumably, other governments have similar deficiencies, and similar records in attempting to meet the need. Those deficiencies will affect international relations.

• Time

There are many specific effects of technology that have altered foreign policy processes. Perhaps the most striking that deserves mention here is how technology has changed the significance and value of time. For example, the rapid-delivery characteristics of strategic weapons systems, the speed and availability of communications and transportation and the rapidity with which events become widely disseminated tend to have the effect of shortening the time available for decision-making in government. In some cases, the time is so short as to raise as a question whether a response system in fact remains under human control.

But this compression of time is accompanied by a stretching of time horizons on other issues, as the effects of current international activities of man on energy, natural resources and climate, for example, have important consequences over increasingly long time frames. Consideration of these issues

must be carried out with the frames of fifty years or, in the case of radioactive waste, much longer time horizons, with inadequate models, enormous uncertainties, and heavy reliance on small communities of experts.

The combination of the two puts an important and rather new burden on the policy process. Though its effects are by no means restricted to East-West relations, the major countries of East and West are heavily affected by them; that burden is only likely to increase in the future.

• Foreign Affairs

The once reasonably clear separation between foreign and domestic affairs is no more. Technology has been critical to the creation of a global economy in which elements thought of in the past as domestic are now directly affected by, or themselves affect, developments in other nations. There are many implications of this change. It is worth noting, however, how important this change is to the formulation and execution of policy.

No longer are foreign policy officials necessarily dominant in the making of foreign policy. Now, the number of legitimate actors has greatly increased, and the factors that must go into a given policy are enormously expanded. In some important policy areas, foreign policy officials are often eclipsed by central bankers, trade negotiators or agriculture officials. A related change, often undervalued but quite frequently of great significance, is the schedule pressure on senior government officials arising because of the number, breadth and variety of questions with which they must deal.

POSTSCRIPT

The discussion above has identified some overarching effects of technology that will condition the environment of the coming decades. It has also insisted on the view that technology and its effects cannot be seen in isolation from their setting. Probing the effects of new technological developments can only be done by exploring their interaction with the many factors present in a particular issue or time. In fact, technological development is itself a product of a complex of factors heavily conditioned by issues that go beyond technology.

If one summary trend growing out of technology had to be singled out, it would be that relevant nations will find themselves much more deeply involved with each other, with other nations, and with issues outside the security area than is the case today. Security-related issues will remain on the agenda, while new patterns of economic and political dependency and new global issues will emerge.

But in the longer run, the societal impacts of technological change may have other, more prob-

lematic, effects that may ultimately be more important than those discussed here. These effects are associated with the psychological impact of technology, which already has been a considerable, if poorly understood, force in human affairs. Attitudes of alienation and antisience tend to emerge and retreat in social affairs, without a clear sense of their final impact. All industrialized nations report serious problems of disaffection and drugs among their youth, presumably caused at least in part by the growing impersonalization of society and by the breakdown of the close-knit family, to both of which technology has substantially contributed.

It is also evident that society is still trying to cope with the effects of the scientific revolutions that removed man from his central role in the cosmos, then reduced him to just one more cog in an impersonal evolutionary scheme, and finally gave him the power actually to destroy his entire heritage, if not his race. How important these developments are in loosening the bonds of social structure is a common focus of enquiry, and certainly they are major causes of recent social change and unrest.

Now, however, two more discoveries are in the offing, which, added to the others, will even more dramatically alter man's view of himself and his relations to his surroundings and to his fellows. They are the unraveling of the mysteries of life and of the brain. It seems to be only a matter of time, though certainly beyond the turn of the century, before both are "solved." What the effects of those achievements will be cannot be anticipated. Though they will certainly have major practical spinoffs, their most important effects will more likely be in psychological and social realms that will go well beyond the changes and problems already induced by those earlier revolutionary scientific discoveries. The question of what will be their effects on global relations seems almost inconsequential in the light of the much deeper and more fundamental alterations in society they are likely to bring about.

THE ENVIRONMENT

(Continued from page 12)

cesspool with carcinogens lurking everywhere have no foundation in the most important measure of personal environment: the length of one's sojourn on Earth.

Undoubtedly, an important reason for this good news is that in many instances the technical fix has worked wonders, bringing today's pollution levels to fractions of their historic highs or means. Electrostatic precipitators have already been men-

tioned; state-of-the-art devices can remove 99.99 percent of all particulate matter from power plant and industrial stacks. To those who remember the grime of cities energized by coal without particulate controls, the transformation has been impressive.

Mobile air pollution sources can be tackled almost as effectively. Before the introduction of automotive emission controls in 1968, American cars averaged 6.6 grams of unburned hydrocarbons per kilometer (g/km); today they emit less than 0.26 g/km, a 96 percent reduction. Typical uncontrolled nitrogen oxide emissions were 2.56 g/km; today's standard with catalytic converters is 0.62 g/km (a 76 percent reduction), and Nissan's exhaust gas recirculation and fast-burn technique achieve less than 0.13 g/km, a 95 percent decrease.²⁶

Specific technical fixes are now available to control hundreds of pollutants, but the most effective general approach has been energy conservation. The post-1973 increase in energy prices finally broke the historic pattern of high energy consumption growth rates in the rich countries. During the first ten years of the new energy era, the Big Seven economies (the United States, Japan, West Germany, France, the United Kingdom, Italy and Canada) boosted their combined gross national product (GNP) by 20 percent (in constant dollars)—while their 1982 primary energy consumption was virtually identical with the 1973 total. This trend is still continuing; the countless opportunities for more efficient energy conversions are far from exhausted.²⁷

A typical North American Snowbelt bungalow may still need about 250 million Btu's of fuels and electricity for every square meter (m²) of living area each year, but superinsulated houses, costing marginally more than the old structures, can be heated with less than 75 million Btu's. In 1988, the North American car fleet averaged about 28 miles per gallon—but there are comfortable family sedans that average well over 40 miles per gallon. New paper made from virgin pulp costs twice as much energy as the recycled product—but North America's recycling rate is only half the Japanese rate.

No actions have such positive environmental effects in rich countries as continued vigorous energy conservation efforts ranging from high-tech innovations to mundane material recycling. And the studies of the poor world's energetics show that, while those countries must increase their per capita energy consumption, much of that rise can also come from eliminating conversion inefficiencies that are in general much more harmful and whose effects are environmentally more ruinous than the inefficiencies in the rich nations. For example, China uses at least three times as much energy for each unit of GNP as Japan, and because its pollu-

²⁶Motor Vehicle Manufacturers' Association, *Facts & Figures '88* (Detroit: Motor Vehicle Manufacturers' Association, 1988).

²⁷David J. Rose, *Learning about Energy* (New York: Plenum Press, 1986).

tion controls are weaker it generates at least five times more emissions for each unit of consumed energy.²⁸

Two of the world's current high-profile environmental worries can be greatly ameliorated by energy conservation: rising atmospheric carbon dioxide and acid deposition. Effective management of acid deposition is in sight, with a combination of controls on the emissions of stationary and mobile sources of sulfur and nitrogen oxides. These moves, yet to come in a United States-Canadian agreement, are already under way in Europe, where sulfurous emissions will be cut by half before the mid-1990's. But these reductions may not bring an end to the disturbing phenomenon of *Waldsterben*. This slow death of forests, especially coniferous forests, has multiple causes: other major factors implicated besides acid deposition include extreme weather, pests, ozone and heavy metals.²⁹

Energy conservation may reduce carbon dioxide emissions, but there is no practical way to control the generation of the gas, and even very low growth rates of fossil fuel consumption will eventually translate into the doubling of pre-industrial concentrations, which stood between 250 and 300 parts per million (ppm). Since the start of regular monitoring in 1958, CO₂ levels have risen from 315 to 344 ppm; 600 ppm, the level commonly labeled the doubling of CO₂, will most likely be surpassed before the end of the next century.³⁰

The most accurate available models of global climate indicate that the doubling of CO₂ would raise the average tropospheric temperature between 2 and 4 degrees centigrade (C); the effect would be negligible in the tropics and most pronounced in the polar latitudes. This would lead inevitably to global climatic changes: shifts in precipitation patterns, altered boundaries of major vegetation systems, more chances of hazardous summer weather, and a mild rise of ocean level (biblical flooding simply cannot arise with such a temperature increase in a matter of a few centuries).

The Earth has seen many pronounced climatic changes, but this change would be the first time the transformation would be anthropogenic, and its rate would be unusually rapid. Clearly, there is a cause for concern—but certainly not for panic. Higher CO₂ levels and warmer weather would also

have beneficial effects, above all increased efficiency of photosynthesis and higher water use efficiency in plants. These two effects could increase yields of principal crops by up to 40 percent, and might allow the cultivation of lands that now receive too little precipitation.

CO₂ is only one of the "greenhouse" gases—nitrous oxide and methane are the other most important contributors—whose practical controls are elusive (for example, more fertilization means more N₂O, more paddy fields and more domestic animals mean more CH₄). Some warming appears inevitable (although it may be considerably less than the still crude computer models indicate) but it should be regarded as an evolutionary challenge calling for effective adaptation—not as a regrettable or even a catastrophic change. With most of the world's food production concentrated between 30° and 50° N, would we prefer another round of advancing glaciers?

The other class of environmental challenges that is not amenable to technical solutions is the preservation of genetic diversity: the protection of tropical ecosystems is a particularly important part of this effort. Many recent writings have offered a highly pessimistic account of this prospect, with virtually all the world's forests destroyed within two or three generations. Their demise would mean the disappearance of up to 1 million plant and heterotroph species (the current total is not known but it is possibly between 2 million and 3 million), a rate of loss unparalleled during the long history of the biosphere.³¹ Clearly, such a development might be a threat to the very survival of civilization.

A combination of the local realization of the indispensability of forest conservation (slowly but clearly taking place in many tropical nations), substantial forest-targeted foreign aid (why should everyone not pay for the preservation of uniquely rich ecosystems?) and the eventual decline of population growth in tropical countries (a trend already discernible in Brazil, Colombia, Indonesia and Thailand) may well preserve a large chunk of the tropical species' diversity. A practical action plan shows this to be a realistic possibility.³²

And while current losses are certainly undesirable and highly degrading at the local level, historic perspective indicates that the fear of the loss of invaluable germ plasm may have been exaggerated: with the exception of cassava, all the principal cultivated food plants have originated either in the subtropics or in temperate regions. Moreover, in the not too distant future a technical fix can also become important here. The advances of genetic engineering, already staggering in its first generation, must be taken into account when contemplating man's future ability to develop new pesti-

²⁸Vaclav Smil, *Energy in China's Modernization* (Armonk, N.Y.: M.E. Sharpe, 1988).

²⁹Don Hinrichsen, "Multiple Pollutants and Forest Decline," *Ambio*, vol. 15, no. 5 (1986).

³⁰Vaclav Smil, *Carbon Nitrogen Sulfur: Human Interference in Grand Biospheric Cycles* (New York: Plenum Press, 1985).

³¹Norman Myers, *The Sinking Ark* (Oxford: Pergamon Press, 1979).

³²World Resources Institute, *Tropical Forests: A Call for Action* (Washington, D.C.: World Resources Institute, 1985).

cidal, drug or food species. The understanding of cellular biochemistry and genetic coding can be as potent a source of such novelties as random discoveries in tropical rain forests.

Recent changes ranging from impressive declines of energy consumption rates to successful diffusion of conservation tillage methods, and recent international actions aiming at major reductions of sulfurous pollution in Europe and the gradual global elimination of chlorinated fluorocarbons (1988 Montreal Accord) prove that human beings can counteract degradative trends, that humans can behave in adaptive ways, preserving the inestimable and irreplaceable natural goods (topsoils saved by conservation tillage) and services (the ozone-protecting function of the stratosphere maintained by the elimination of halocarbons).

But even these successes would be overwhelmed by continuously rising populations. There is no doubt that the most important indicator of the global environmental outlook in the next 75 years will be the rate of population growth. Debates about the carrying capacity of the Earth are worthless unless one specifies exactly the energetic foundations, material flows and quality-of-life indicators to be enjoyed (or endured) by given billions of people. At the current count of 5 billion human beings and with the current division of riches (roughly one-fifth very rich, another fifth tolerably well off, the rest in different gradations of poverty) we are already committed to a wide range of practices that have widespread environmental impact and whose drastic modification would change the image of our world.

Notwithstanding the illusory exhortations of soft-path proponents,* trying to do without fossil fuels would cut the industrial world's standard of living by at least 75 percent, and it would virtually eliminate the poor world's chances for any relatively fast economic gains; the inevitable transition to renewable energy sources (or to nuclear energy) will take many generations to accomplish, and our heavy dependence on fossil fuels will continue certainly past the year 2050, most likely well into the 22d century.³³

Trying to do without synthetic nitrogenous fertilizers would force a reduction of the global population by at least 1.5 billion: there is simply not enough organic nitrogen to be recycled into crops to feed 5 billion people. Eventually, this practice may be supplanted by genetically engineered nitrogen fixation in all kinds of plants (today only leguminous species can do the trick) but, once again,

*Those who rely on decentralized renewable, small-scale energy sources.

³³Vaclav Smil, *Energy Food Environment: Realities Myths Options* (Oxford: Oxford University Press, 1987).

generations of dependence on synthetic ammonia lie ahead.

Without stabilization of the global population sometime during the next century, the intensifying resource needs and growing waste metabolism of industrial civilization (with the success of technical fixes overwhelmed by the sheer increase of total output) will rapidly diminish any hope for maintaining a biosphere both supporting a decent life for its inhabitants and preserving a habitable milieu for future generations.

In the long run, the rise of environmental consciousness will have effects comparable to the consequences of the last three great Western transformations—the Renaissance, the Reformation and the Industrial Revolution. A legacy of centuries of predatory attitudes and an adversarial ethos cannot be discarded in a matter of years; yet a new way of understanding is making its way slowly, and often in roundabout ways characteristic of civilization's advance.

No single species has ever transformed the biosphere as much as human beings have since the beginning of this century—and much of this transformation has led to degradation, a trend that cannot continue with impunity. But during the past four generations humans have also learned more than all humans learned in all the preceding millennia about the complexity of the biosphere, about its amazing resilience, about the ways of using and managing the ecosystems in sustainable ways.

Nimble adaptability has been the hallmark of our species. This quality has carried us through enormous environmental upheavals and it has brought longer and richer lives to an ever-increasing number of people. In the coming years, our deepening understanding of the biosphere must be translated into effective action to preserve the integrity of the Earth's environment. The record may not look reassuring, but unprecedented challenges bring extraordinary responses. Apprehension may be in order—but our hope lies in not underestimating our adaptive capabilities. One must always hope that the Linnaean designation of our species—*sapiens*—is correct. ■

GLOBAL SECURITY

(Continued from page 4)

will not again happen—that the Brezhnev Doctrine is dead—history, and the fact that commitment to nonintervention in East Europe has yet to be very severely tested since Gorbachev's accession to power, leads to some skepticism. It is certainly manifest in East Europe. One has to be even more skeptical about a peaceful resolution of nationality problems and aspirations for independence within the inner empire—the Soviet Union proper, for ex-

ample, and particularly the Baltic states.

Beyond these points, there are added grounds for pessimism in the surfacing and development of severe problems throughout East Europe: notably, in the continuing decline in the economy of Poland, the lack of support for Poland's Wojciech Jaruzelski regime, and the lack of any alternative that could command support and turn the country around; in Hungary, where the economy is in serious trouble, notwithstanding political and economic liberalization along lines consistent with glasnost and perestroika; in Romania, where without any such movement, the economy is in even worse shape; and in Yugoslavia, where the nationalities and economic problems, interacting synergistically, raise the prospect of crises unprecedented since Yugoslavia's break with the Soviet Union.⁹ Memories of the role of decay in the Austro-Hungarian empire and conflict in the Balkans in the development of World War I remain, and there is clearly a basis for great concern; this concern is reinforced by reflection on what happened after the post-World War II withdrawal of other great colonial powers from the Indian subcontinent, the Middle East, Southeast Asia and Africa: 40 years of conflict, not yet over, with the loss of millions of lives.

If one wants, then, to look for a "worst case" alternative to the success of reform in the Soviet Union, it is probably not a return to the cold war of the last decades, but a conflict instigated by actors over whom the central authorities in Moscow, Washington and the other major capitals may have little direct influence or control: conflict certainly not wanted by the major powers that may nevertheless spread unpredictably to envelop them.

WHAT CAN BE DONE

The question arises as to what actions the major powers might take to make the "worst case" alternative less likely. It should be noted that much of what the Soviet Union and the United States have

⁹For a discussion of problems of East Europe, particularly Hungary and Poland, see the articles by Timothy Garten Ash in the *New York Review of Books*, September 29 and October 13, 1988.

¹⁰Even if one were to give much more weight than is given here to the possibility of simple reversion to pre-Gorbachev thinking and policies in the Soviet Union, there is much to be criticized in United States defense policy. In particular, the commitment of the Reagan administration to strategic forces modernization, to its strategic defense initiative, and to the Lehman shipbuilding program for the United States Navy has been unwise and implies expenditures grossly out of line with reasonable budget priorities. Whether these programs have been instrumental in bringing the Soviet Union to the arms control and disarmament negotiating table is contentious. One could argue that changes in Soviet priorities may have been more important and that, in any case, the agreements reached and those in prospect are unlikely to justify the costs of these programs.

been doing with respect to arms is probably totally irrelevant. The development and acquisition of more sophisticated means of delivery of nuclear weapons—Trident submarines and missiles, Stealth bombers, SS-24's and 25's or defenses against them (or the forces covered by the INF Treaty) — are most unlikely to have much effect on decisions by members of Solidarity about whether to strike or on decisions by the Polish government about whether to resort to violence, nor are they likely to bear on whether Hungarian and Romanian forces might clash over minorities issues, or on the likelihood of Soviet intervention in such cases.

The overall balance between NATO and Warsaw Treaty Organization (WTO) forces is likely to be scarcely more important (although it is possible that whether Soviet forces were stationed in Poland, Hungary or Romania might have relevance). Yet it is concern about these nuclear delivery systems and the conventional forces balance in Europe that has been the central and almost exclusive focus of arms control and disarmament efforts for the last two decades. And this concern has been the focus—to the degree that there has been any focus—of discussion of United States defense policy in the presidential campaign of 1988.¹⁰

In reality, whether the "new thinking" in the Soviet Union succeeds or fails, the end of the division of the world into two hostile blocs is probably at hand. At least we should act on the assumption that whatever bases there may have been for conflict in the four decades after World War II have largely disappeared. It will be in the interest of the West—and most of the rest of the world—to see that bipolarism ends.

The key to this is recognition that escalation of violence to the point of engagement of Western and Soviet forces is far more likely to result from each party's fear of initiative by the other party than because of a perception of opportunity to be seized. To the degree that the major powers retain substantial military forces, the emphasis should be, as Soviet leaders have argued, on defensive capabilities. Difficult as it may be for the military to accept, this must carry over even to the point of maintaining postures that are relatively inefficient from a narrow military perspective if they appear less threatening than alternatives. The objective must be not to prevail in battle but to forestall it *by minimizing fear of attack* and, to a lesser degree, through deterrence by denial.

If the restructuring of the forces relevant to Europe could be achieved, there would be a reduction in the propensity for escalation involving the direct engagement of the forces of East and West. At least as important, the rationale for Soviet maintenance of control over East Europe and for in-

tervention there in the event of crisis would be eliminated, or at least it would be much reduced. In large measure, such restructuring can probably best be effected by unilateral decisions taken in the expectation of reciprocity. Either the East or the West alone could undoubtedly move some distance down this path without great military risk, but at some point domestic political considerations would likely prove to be a severe impediment.

To the degree that there is a role for negotiations, it should be with the overriding objective of bringing about such changes; and the achievement of balance and/or symmetry—another objective that has commanded much attention—should be decidedly secondary.

The other opportunity for a direct Western role in reducing the likelihood of conflict in East Europe and the Balkans—and in much of the developing world—will be economic. As long as there are major structural problems as there are, for example, in Poland and Yugoslavia (not to mention Latin America and Africa), economic assistance and the liberalization of trade may be of only limited help, and there may be validity in the argument that without reform, such measures may even serve to prop up regimes and institutions that are best done away with. Accordingly, there will be instances where it will not be easy to decide whether such help and liberalization will be, on balance, desirable, or what conditions should prevail; but certainly it should be possible to approach the problems of those nations that face economic crises more constructively if East-West competition for influence is muted.

The third great hope lies in the possibility that the World Court and the United Nations may play greater roles in the adjudication of international differences and in peacekeeping. The record in the past has been poor—so poor that suggestions of dramatic change for the better may seem naive—but if all the great powers were committed to supporting such activity, the earlier visions of what these institutions could accomplish might suddenly seem more realistic. Soviet expressions of commitment along these lines, and actual payment of arrearages, are most encouraging; so too are the recent changes in United States positions.

A NEW WORLD

In summary, the bipolar adversarial relationship between East and West seems destined to end. In part this is because military strength is being seen as a not very exploitable instrument of power and because of the recognition that military power has been the only strong suit in the Soviet hand. Other centers of great economic strength and increasing political strength are emerging: Japan and West

Europe. With these changes, reform, including a turning inward, are imperatives for the survival of the Soviet Union as a modern power. The demise of the bipolar world can no doubt be delayed somewhat by reaction and unwisdom on the part of the West, but it will come. The real challenge is to make the transition as peaceful as possible.

Gorbachev's hand can probably be strengthened or to some extent weakened by successes or failures in dealing with the United States and the other major powers on issues of arms and trade. But this is likely to be of only marginal importance to the success or failure of the internal political-economic reform movement that he has initiated. This indirect effect aside, what outsiders can do will likely have little impact. Whether perestroika is to succeed or fail will be determined almost entirely in the Soviet Union.

There are, however, actions that the West can take to capitalize on success, should it occur, in the interest of the world community. These include reducing the West's capability and propensity for unilateral military intervention in the third world, supporting international institutions with greater vigor as the preferred instruments for dealing with conflict and crises, and focusing on the constructive roles a changed Soviet Union might play in the international community (instead of trying to exclude it). Even more important, actions may be taken to make the consequences of partial or total failure less serious. Here, adopting military postures relevant to Europe that are patently defensive would be especially important. Looking forward to these alternatives of success and failure, rather than assuming an indefinite continuance of the cold war, should dominate thinking about global security.

Whatever the outcome of the reform efforts now under way, the world will continue to be an insecure place. The calamity of the Iran-Iraq war, the acquisition of a nuclear weapons capability by Pakistan, the debt crises in Latin America, and the ravages in Bangladesh due to flooding and overpopulation can, after all, hardly be traced directly, if at all, to the cold war. More such problems can be expected. But if leaders in the West and in the Soviet Union can recognize that the cold war is an anachronism, they will at least be able to concentrate their energies more effectively to deal with these other threats. ■

CHURCHILL

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stairway which leads to a dark gulf. Look back upon the last five years—since, that is to say: Germany began to rearm in earnest and openly to seek revenge. If we study the history of Rome and Carthage, we can understand what happened and why. It is not difficult to form an intelligent view about

the three Punic Wars; but if mortal catastrophe should overtake the British Nation and the British Empire, historians a thousand years hence will still be baffled by the mystery of our affairs. They will never understand how it was that a victorious nation, with everything in hand, suffered themselves to be brought low, and to cast away all that they had gained by measureless sacrifice and absolute victory — gone with the wind!

Now the victors are the vanquished, and those who threw down their arms in the field and sued for an armistice are striding on to world mastery. That is the position — that is the terrible transformation that has taken place bit by bit. Now is the time at last to rouse the nation. Perhaps it is the last time it can be roused with a chance of preventing war, or with a chance of coming through to victory should our efforts to prevent war fail. We should lay aside every hindrance and endeavor by uniting the whole force and spirit of our people to raise again a great British nation standing up before all the world; for such a nation, rising in its ancient vigor, can even at this hour save civilization. ■

THE MARSHALL PLAN

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for the Marshall Plan. It might lead Europeans to believe that they did not have to do anything to help themselves — that, if they merely sat back with folded hands, American loans to finance our export trade would be forthcoming anyway. This, would certainly not be the view of Congress.

The Russian press also denounced the Marshall Plan on many other grounds: (1) It was an attempt to split Europe apart and destroy its unity. This, however, was the very thing which Russian policy had been bringing about ever since the end of the war. (2) It was another example of American imperialism, like the Truman Doctrine for dominating the Middle East. But, in fact, Truman's aid to Greece and Turkey aimed to protect those countries from communist aggression and intrigue. Russia's true attitude was revealed a little later when Mr. Gromyko vetoed the American proposal in the United Nations Security Council for setting up a border commission to see that Yugoslavia and Bulgaria did not aid Communist guerrilla forces in Greece. (3) It would mean interference in the internal affairs of other countries. But Bevin and Bidault had made clear that there would be no compulsion — that all agreements would be voluntary and there would be no infringement of any country's sovereignty. There would be nothing like the Soviet Union's flagrant interference in the internal affairs of Rumania, Hungary, and the other Communist-controlled satellites. This was another instance of the familiar Russian propagandist trick of accusing

others of what she herself was doing. Soviet interference was soon strikingly manifest when the Kremlin prevented Poland and Czechoslovakia from joining the Marshall Plan.

THE MOLOTOV PLAN

After Mr. Molotov left Paris on July 3, Britain and France at once issued invitations to 22 other European countries to join in a conference at Paris to consider drawing up a blueprint of Europe's needs and resources for presentation to the United States.

In order to thwart as far as possible this move toward the Marshall Plan, the Kremlin and Soviet press emphasized another line of attack. It was argued that the United States had not stated definitely how much it would give and that it was unlikely that Congress would carry out even Secretary Marshall's indefinite promises; countries which counted on it would be building on false hopes; it would be better for them to follow the Russian lead. They were warned that otherwise they ran the risk of suffering Soviet resentment some day in the future when the Soviet Union would be economically much stronger than the United States.

Most of the Russian arguments noted above either sprang from Marxian ideology or were propaganda intended to confuse and mislead the people of Russia and the discontented masses of Europe. The Soviet Union's basic opposition to the Marshall Plan was three-fold: it would increase the influence and prestige of the United States and the capitalist countries by lessening poverty, hunger and chaos; it would tend to unite Europe and make it less adapted to Soviet propaganda; and it would weaken what now was beginning to be called the "Molotov Plan."

The Molotov Plan was nothing new. Russia had been working toward it ever since the end of the war. It aimed to bring as many states as possible under Soviet economic and political control by the presence of Russian troops, by the infiltration and appointment of Communist officials, and by trade agreements which would bind countries to the Soviet system of planned economy. Thus, Russia would be steadily strengthened, just as Hitler had steadily strengthened Germany. Eventually, the day would come when the Soviet system would be strong enough to give the final push to bring about the inevitable overthrow of the capitalist system as laid down in Marxian dogma.

COOPERATION FOR THE MARSHALL PLAN

Twenty-two states were invited by France and Britain on July 3 to send delegates to Paris by July 12 to join in putting the Marshall Plan into operation. How many would accept? Molotov had

banged the door on it, but it was opened again for him if he should change his mind. Polish and Czechoslovak officials at first stated that their countries would be represented. *Tass* announced that they would not be represented. The Russian ambassador in Warsaw was reported to have forbidden Poland's acceptance. The Czech Premier, Klement Gottwald, flew to Moscow, conferred with Stalin and Molotov, was inveigled into signing a new trade agreement with the Soviet Union, and then telephoned to his Cabinet in Prague that the Paris invitation must not be accepted. So both countries were forced to reverse their attitude and abandon a policy undoubtedly favored by a majority of their peoples. What about Russia's noble protests about "interference in the internal affairs of other countries?"

Russia's six other satellite states, more abjectly under Moscow's thumb, declined the invitation in terms that echoed the Soviet press objections to the Marshall Plan. The other 14 states quickly accepted and sent delegates to Paris, and thus, with Britain and France, made up the 16-power "Conference for European Cooperation" which began its sessions on July 12. These states were: Austria, Belgium, Denmark, France, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Sweden, Switzerland, Turkey, and the United Kingdom.

Absent from the Paris Conference were the states east of the Stettin-Trieste line: Albania, Bulgaria, Czechoslovakia, Finland, Hungary, Poland, Rumania, the Soviet Union, and Yugoslavia.

Absent also were Germany, which had no government to speak for its 66 million people, and Spain, which was not invited because its dictator, General Franco, was disapproved of.

The larger area and population of the Eastern European bloc (Molotov Plan) does not at all mean that it is stronger than the Western bloc (Marshall Plan). Russia and her satellites suffered far greater physical and industrial destruction in the war than Western Europe. Even before the war they were far inferior in industry, means of communication and technology, and are so today, in spite of Russia's considerable achievements. The three western Military Zones of Germany, which include that country's greatest industrial resources, will probably be integrated with the Marshall Plan bloc. Finally, the most important, behind the latter stand the immense power of the United States. ■

THE UNITED STATES AND RUSSIA IN WORLD WAR II

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any replies from them.

For its China policy the Roosevelt administration ever kept ready its rose-tinted glasses. If the fatal

weakness of the National Government was not visible at the time of the Cairo meeting, it began to be demonstrated by the spring of 1944. A violent altercation between Chiang and the peppery General Joseph Stilwell, who had promoted the idea of a Burma campaign, uncovered the gravity of Chiang's war with the Chinese Communists.

Roosevelt made an effort to compose the struggle. The American Embassy in Chungking argued with Chiang the possibilities of sharing his power with the Communist leaders. A special mission headed by Henry A. Wallace presented the same case to the Generalissimo, but got for an answer the advice to the United States to "show aloofness" toward the Chinese Communists. Wallace was followed immediately by a second mission headed by Brigadier General [Patrick] Hurley, chosen at the instance of Stimson and Marshall. In both of these cases the President ignored the Department of State. Hurley paid a visit to Moscow in September, 1944, and got from Stalin's own lips an expression of indifference toward the Chinese Communists. Hurley then ranged himself violently against the latter; and when the two Communist leaders, Mao Tse-tung and Chou En-lai, secretly approached General [Albert] Wedemeyer, who had succeeded Stilwell, to arrange for them a personal interview with the President in Washington, Hurley intervened to foil the attempt. What might have come of this we cannot say. But the President, who was by now out of touch with the Department of State, was deprived of his last opportunity to hear the case of Chiang's opponents. Roosevelt stuck by Chiang to the last. Meanwhile, the Soviet government continued to assert its lack of interest in the Chinese Communists and to express its readiness to recognize the National Government. At Yalta, Stalin, having made provision for the restoration of Russia's right in Manchuria, raised no objection to concluding a treaty with Nationalist China. This in fact he did on August 14, 1945, as we remember, six days after his army had started into Manchuria.

We shall probably never know the full story of how the Roosevelt administration was inveigled into binding itself irrevocably to the falling fortunes of Chiang Kai-shek. Behind the scenes in Washington, Chiang's two brothers-in-law, H.H. Kung and T.V. Soong, labored incessantly to get the ears of officials in the Treasury, War, and Navy Departments. Chiang himself sent numerous cables to various persons within the administration. If the head of any other foreign state had behaved in this manner, verily he would have been given a stinging rebuke. But there was no limit to which the American government was willing to indulge the politicians of Nationalist China. On his part, Secretary [Cordell] Hull, while willing to stand by Chiang,

wanted to take a firm hand with the Generalissimo, but was obviously thwarted. Hull told Lord Beaverbrook on July 24, 1944, that in his opinion China had "only a fifty-fifty chance to reestablish herself as a great power." In reply Beaverbrook expressed the British view that Chiang's regime was not a real government, but was "something plastered on top of China like a button on a coat."

From this brief history of the wartime diplomacy of the Roosevelt administration certain well-meant but tragic blunders stand out. Roosevelt's predisposition in Russia's favor, his confidence in her good intentions, his overweening faith in his personal ability to persuade the Soviets to follow the American blueprint for peace—these were illusions of the first order. They were unwarranted because of the information available that the Soviets were determined to exploit the war for their own aggrandizement. They were unwarranted because of their utter neglect of Russian history, which shows long-range trends pointed at the penetration of western Europe, at the capture and control of the Balkans and the Turkish Straits, and at the domination of the Far East through the absorption of Manchuria.

When he dealt with Stalin at Yalta for the restoration of Russia's rights in Manchuria, Roosevelt threw away all of the lessons of the Russo-Japanese War, a war which had been fought by Japan with the encouragement and support of the previous Roosevelt [Theodore] and with the enthusiastic backing of the American people. The promotion of China under Chiang Kai-shek to the rank of a first-class power and the imaginary picture that Roosevelt drew of her as the "policeman" of the Far East—these take their place as the great American pipe dreams. In supporting Russia's ambitions in Manchuria, Roosevelt revealed that he knew nothing of the history of that region. The control of Manchuria centered on the rights which Russia had had before 1904 and which she had lost to Japan. Both Russia and Japan each in its turn dominated Manchuria because of those rights. China held the "sovereignty." To expect the Soviets under their treaty of August 14, 1945, with Nationalist China to reverse all previous trends, behaving henceforth with *noblesse oblige* toward the Chinese, was to display incredible simplicity. If Nationalist China ever had a chance to become the "policeman" of the Far East, it was wiped out on the day that the Russians re-entered Manchuria.

And behind these egregious blunders of Rooseveltian diplomacy—misplaced confidence in the Soviet Union, unwarranted faith in China's future—there was a third: the failure to appraise the permanent value of Japan as an independent power in the Far East. To put the matter in another way, the destruction of Japan spelled, not the success of

Nationalist China, but the aggrandizement of Soviet Russia to the position of dominant power in the Far East. ■

AMERICAN MIRAGE

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there are a number of explanations. Greater unionization and more emphasis on social solidarity in wage setting is one explanation. More generous social welfare systems limit the individual's need to accept low-wage job offers. Foreign minimum wage laws mandate much higher wages than those required in the United States. In northern Europe, minimum wages are often more than 80 percent of average wages while in the United States, they are less than one-third of average wages. Minimum wage laws are also enforced. In the United States, 8 million people work below the legal minimum wage. As a result very low-wage workers may be hired in the United States.

Demand patterns for additional services are roughly similar among advanced industrial countries. The differences in employment growth are to be found almost entirely in different patterns of productivity growth.

Much has been made of the fact that service jobs pay only two-thirds as much as manufacturing in the United States. As can be seen abroad, low wages are not intrinsic to the service sector. America could have a service sector that pays wages comparable to those in manufacturing.

If it did, however, a price would have to be paid. Employment growth would be much slower. It is not possible to have the best of both worlds—high service wages and high service employment growth. The social merit of the two systems depends on what the country wants. America has a low-wage problem heavily concentrated in services. Most of Europe has a high unemployment problem produced by a lack of new service jobs.

LOOKING FORWARD

While service employment in the United States has been a growing share of total employment, it is about to start shrinking. Most of the sources of growth are about to end.

The demand for health care workers is likely to slow down since Americans will not continue to let health care expenditures grow as a fraction of GNP as they have in the past. Attempts to do this in both the public and private sectors are now under way. When they succeed, and they will eventually succeed, health care employment will slow down.

The growth in restaurants is coming to a natural stopping point. When most meals are eaten away from home, as they now are, the growth in restaurant employment is not far from its natural stopping

point. So too, there is a natural limit to longer shopping hours with their concomitant demand for more sales personnel.

In producer services, all the main growth nodes can be expected to slow. Slower growth in restaurants and shopping centers means slower growth in real estate and building maintenance. White collar employment cannot continue to grow at the pace of recent years; an office glut seems to be already upon us.

The growth in financial services was essentially a one-shot adjustment to the creation of a world economy and a more volatile set of financial variables. When the adjustment is completed, and most of it is now behind us, employment growth will automatically slow. In addition, because of the low American savings rate and the consequent higher cost of capital, American financial institutions are going to suffer enormous competitive pressure in the next decade. Foreign financial institutions will be able to offer cheaper loans. Investors also want to hold their funds in financial institutions where currency values are rising.

For all these reasons, the loss of market share experienced by manufacturing in the past 10 years is liable to be replicated by finance in the next 10 years. Thus far foreign financial institutions have had to wholesale their American loans through American retailers but they will soon have bought or built their own retail networks and should be able to circumvent their American competitors. While many of the jobs associated with these foreign financial institutions will be in the United States, the headquarters' jobs will be located at home bases. As a result, the shift from American to foreign financial institutions is apt to mean a net loss of jobs.

The rapid growth in law firms seems already to have come to an end, and the growth in computer software firms is problematical. The rate of growth in computer hardware sales has already slowed, and behind it must come a slowdown in software sales. No one knows, however, just how long the time lag is between a slowdown in hardware sales and a slowdown in software sales.

The rate of growth in numbers of temporary workers to a great extent depends on the course of social legislation. The big advantage of temporary workers is not in the basic wages paid but in the ability to avoid paying fringe benefits. Political movements are now afoot to extend fringe benefits to temporary or part-time workers. If these movements succeed, the competitive advantage of subcontracted labor from security or temporary help agencies will disappear. If they need workers, industrial employers will hire them directly.

Manufacturing employment is apt to be growing very rapidly in the next decade. This conclusion

follows directly from the simple arithmetic observation that any country must eventually balance its balance of payments. Eventually the dollar will fall to whatever level is necessary for the United States to balance its international accounts and when it does the United States will either export more manufactured goods or replace imported manufactured goods with domestic alternatives.

In contrast, service exports are both small (\$58 billion in 1987 when earnings on foreign assets and military transactions are subtracted from the published totals) and equal to imports (\$58 billion in 1987). An expansion of United States exports of the necessary magnitude is not in the cards. Most services have to be produced where they are used.

Since manufacturing wages are higher than service wages when manufacturing expands, most of its work force will come from services. Since there are not enough unemployed workers to replace the service workers who will be lured into manufacturing, service employment is apt to shrink. Service wages will rise in response to this competition for labor with manufacturing, but this will further increase incentives to automate services and reduce employment.

CONCLUSION

History is littered with the extrapolation of linear trends that have not proven to be true. In the future, the "service economy" and the "post-industrial state" will be seen in the same light.

More important, most services are not the human-to-human activities that are envisioned when the word "services" is used. Many service industries are in fact goods-producing industries (electric and water utilities) that are classified as service industries for historical reasons. Others are highly capitalized, use sophisticated production technologies, and employ some of America's most skilled workers.

Services are not going to grow and swallow the rest of the economy. To maximize their welfare, people will always want a mixture of goods, services and leisure. And if they are to have this mixture in their consumption, they must have the same mix in their production activities. Unless society wants nothing but services, not everyone can be a service worker. ■

TRADING BLOCS

(Continued from page 16)

American trade policy has some worrisome aspects, too. The fact that it will take a swing of some \$200 billion in the United States trade balance over the next few years to keep the foreign debt from soaring will tempt Americans to resort to extremes to increase exports or reduce imports. This is all the

more worrisome because the United States now has a trade bill that gives the government license to take unilateral protective action or to retaliate, with far less international justification than ever before. A ready-made excuse could be found to keep out Asian producers and look to Mexico as a substitute. If economic pressures south of the border increase, as may well happen, or if there are intractable problems persuading South Korea, Taiwan and others in East Asia to take more American goods (as well may be the case) the stage will be set for an inward-looking North American strategy not conducive to freer trade with the rest of the world.

As for the Pacific bloc, a tightly woven industrial structure—built around Japanese and South Korean notions about state-dominated economic growth and all that the concept entails—would not lead to an easily penetrable market.

Beyond protectionism, there are other problems in the evolution of superblocs. A world of mercantilistic superblocs will create major strains in the Western Alliance and in Japan.

For budgetary and other reasons, America will be under increasing pressure to demand military burden-sharing. This course may well backfire. West Europe is preoccupied with commercial ties to the Soviet Union and with conventional force reductions; Soviet leaders are unlikely to spend much more for defense. There is no consensus for rearmament in Japan. The longer term implication is that if the burden-sharing initiatives are mishandled, Americans would withdraw troops without compensating Western defense. This is no recipe for military stability. Soviet General Secretary Mikhail Gorbachev may be well intentioned, but in the longer term, a weakening of coordinated allied defense is surely reckless.

In a world of superblocs, nonalignment would not have the cold war connotation of refraining from entanglements with the United States or with the Soviet Union. The poles will be the three superblocs. And the new nonaligned group may be the Soviet Union, China, Poland, Brazil and India, which could be the battleground for mercantilist scrambles.

Finally, there is the question of global approaches to the awesome international problems of our age. Superblocs are likely to put more emphasis on regional policies and organizations. This will ensure fragmented efforts in place of broader coordination. On drugs, on terrorism, on the environment, on economic development—it is difficult to see how superblocs, acting on their own, can do anything but retard what progress could otherwise have been made.

The trends are there, unfortunately, in the increasing ineffectiveness of the world Bank, the In-

ternational Monetary Fund (IMF) and some of the United Nations agencies. Americans should care about this breakdown not only out of concern for solving problems that affect their lives, but also out of recognition that the best chance for Americans to influence these problems is to be *primus-inter-pares* in a global institution.

The next United States administration will not find it easy to harness the centrifugal forces of the emerging regional superblocs. But it ought to try.

The first imperative is to recognize the trends. The issue of superblocs and all they represent is particularly timely. European officials are deciding on their external trade strategy. The Japanese government is considering its position in East Asia and asking what role South Korea and Thailand should play in economic and foreign policy aims. And Washington must consider what happens when the United States-Canadian free trade agreement goes into effect, and particularly how to deal with Mexico in the framework of a North American community. Moreover, the race among American allies for concessions from Gorbachev—going on right now—will create new problems if there is no agreed Western framework for dealing with the Soviets.

Washington itself needs some framework for dealing with the superblocs. In the cold war years, it was the Communists versus the West and the watchword was “containment.” For a brief period in the late 1970’s and early 1980’s a lot of attention was devoted to “North-South” issues. Spurred by OPEC (the Organization of Petroleum Exporting Countries), the struggle between the developed and developing nations was superimposed on the East-West theme.

The superblocs need to stimulate a new way of thinking about the purpose of foreign policy beyond the givens of promoting peace, prosperity and human rights. In the world of superblocs, the objective should be to promote outward-looking blocs in a framework of cooperative allied relations. This is something between balance-of-power politics and United States hegemony. The starting points are strong American leadership that emphasizes multilateral diplomacy and integration of policymaking in the economic and national security arenas.

American leadership is indispensable. The natural tendency and, indeed, the existing momentum in Europe is to turn inward. Japan is almost certainly going to key its policies to the United States.

The next administration will be watched very carefully in the first 100 days to see whether it will have the stuff to lead. Here are some of the actions it could take to keep the superblocs operating in a cooperative framework:

- Decisive steps on the fiscal deficit are a *sine qua non*. But these have to be closely coordinated with

West Europe and Japan so that currency markets support rather than undercut the efforts. The harmonization of United States domestic and foreign policies is essential.

- The next American President should make it clear that he intends to use the new trade bill to open markets and not to close them. In the multilateral trade negotiations now going on—the so-called Uruguay Round—it would be wise to lower the bluster about retaliation in agriculture with Europe; that will only backfire.

- With respect to Latin American debt, Washington ought to move quickly to forge a consensus with West Europe and Japan on the next steps. Large-scale debt relief must be provided for individual countries.

- The new administration must look at the organizational structure for international economic cooperation with an eye to invigorating it. Today, the IMF and the World Bank are confused about their missions, and they are the subject of bitter arguments among their shareholders. The next President must state strong support for multilateral efforts right away, then follow up with concrete initiatives.

Additionally, a closer relationship in policy making between economics and national security is vital. This ought to happen in the United States through the National Security Council. The entire issue of competitiveness, including technological capability in the defense arena, demands it. But this demands action on an international scale, too.

Economics and national security also overlap in commercial relations with the Soviet Union. The rush among West Europeans to lend large sums to Moscow needs to be recognized. West Europeans are closer to the Soviet Union and have always seen the potential for improved commercial relations; the United States needs some better way to discuss and coordinate its commercial relationship with the Soviet Union.

The first several months of 1989 will be pivotal in terms of United States foreign policy. During the presidential campaign, neither candidate denied a need for change. The next President should not make the mistake of thinking that the rest of the world will be standing still while Washington is getting organized. Major forces are already in train. The evolution of regional superblocs, in particular, has the potential to divide the Western alliance. The next President has a chance to get a handle on this, but if he wants to do so, his best chance will be to move decisively, and soon. ■

THE U.S. IN VIETNAM (Continued from page 34)

which either the Soviet Union or China will move.

What about American prestige? Its decline because of the liquidation of United States involvement in Vietnam is a matter for speculation; its drastic decline by virtue of the involvement is a matter of fact. In the eyes of most of the world, the most powerful nation on earth is trying to force a nation of primitive peasants into submission by the massive use of all the modern means of mass destruction (with the exception of biological and nuclear weapons) and it is unable either to win or to liquidate that war. The champion of the "free world" is protecting the people of South Vietnam from communism by destroying them. And in the process, the world is moved closer and closer to an unwinnable war with China, if not to the cataclysm of nuclear war.

If the United States were to liquidate the war, the damage to its prestige would at least in some measure be repaired. The United States would show that it is wise and strong enough to admit a mistake and correct it. The liquidation of the misadventure need not affect its future policies.

What the argument about prestige really amounts to is a concern for the prestige not of the United States but of those who are responsible for its involvement in Vietnam. But those who are responsible for the straits in which the nation finds itself today should bear the consequences of their ideological blindness and political and military miscalculations. They ought not to ask the nation to suffer for their false pride. ■

AMERICA'S CHINA POLICY

(Continued from page 36)

Leonard Woodcock and the Chinese minister for foreign trade, Li Qiang, signed an agreement committing China to the purchase of six million to eight million metric tons of American wheat and corn per year for the four years 1981 through 1984.

At the National People's Congress in September, 1980, Zhao Ziyang had been elected to succeed Hua Guofeng as Premier. And Deng Xiaoping had given up his post as Vice Premier, while retaining the position of Vice Chairman of the Chinese Communist party (CCP). These power shifts were not expected to bring any change in China's domestic or foreign policies. In November, Ronald Reagan was elected President of the United States. Would this accession to power bring change in America's China policy? In the event, the new administration did not pursue the campaign line with regard to Taiwan. And Beijing did not press its complaints.

The reason was clear enough: both sides saw the promise of economic profit in a new Sino-American relationship, and both sides viewed the relationship as offering potential leverage for their respective struggles with the Soviet Union. White House officials took pains to emphasize that the President

still intended to strengthen ties with Taiwan within the confines of the Taiwan Relations Act of 1979, the meeting apparently quieted troubled waters. The rapprochement process was under way. ■

JAPAN AND THE U.S.

(Continued from page 38)

against Japanese imports should abate. If so, the pressure in Congress to penalize Japan through import quotas or tax measures should fade.

The future is frequently assumed to be some modest variant of the present. Yet as economic and security issues are linked more explicitly, the Japanese must move beyond their convenient but narrow focus on economic performance. Moreover, with its vitality and economic strength, Japan can create security options for itself that smaller and less dynamic societies could not attain. ■

THE SOVIET UNION AND NICARAGUA

(Continued from page 40)

The escalation of insurgency activity against Nicaragua makes it difficult to argue that such deliveries are to be used for offensive purposes.

Moscow has not publicly acknowledged weapons transfers to Nicaragua, though it has emphasized Sandinista statements that Nicaragua has the right to seek arms from any source. It has also failed to acknowledge Nicaragua's public requests for fighter planes. Since 1981, there have been reports that Nicaragua is expanding air fields to receive sophisticated jet aircraft. It has also been widely reported that 70 Nicaraguans have been trained in Bulgaria to pilot and repair MiG aircraft. Soviet planes earlier earmarked for Nicaragua remain in Cuba, partly because of United States warnings.

Soviet authorities have frequently intimated to United States diplomats that the "Nicaraguan problem" can be resolved only in the context of United States-Soviet relations. Sandinista eagerness for close ties with Moscow has permitted the Soviet Union to pursue a virtually cost-free policy. Nicaragua could represent a bargaining chip in Moscow's preferred "political settlement" in Afghanistan.

Moscow appears to be pursuing a wait-and-see, long-term strategy in Nicaragua. It has made minimal economic investments and encourages the Sandinistas to diversify their trading partners and aid donors. Meanwhile, Moscow directs its efforts to the training of a new pro-Soviet technological, cultural and political elite. Soviet bloc presence in the intelligence, security, communications and military fields has deepened, but Moscow provides only enough military aid to make United States military intervention costly and save the Soviet

"revolutionary" reputation, not enough to guarantee survival or risk confrontation. The tragedy for Nicaragua is that taken together Washington's intransigence, Moscow's cynicism and Managua's imprudence have converted that tiny country into the newest arena of superpower contention. ■

THE REAGAN ADMINISTRATION AND THE MIDDLE EAST

(Continued from page 41)

Israeli and Syrian forces from Lebanon and to help Lebanon recover. In retrospect, it is debatable whether it was within the capacity of the United States to achieve either goal. Syria and Israel each had its own agenda in Lebanon; neither included total withdrawal from Lebanon, whether for reasons of political influence (Syria) or security (Israel). And helping to resolve what was, indeed, a civil war in Lebanon would have required a degree of knowledge, subtlety, diplomatic skill and political commitment lacking in the administration.

In the event, United States diplomatic blunders compounded the problem. The upshot of ill-conceived and half-hearted United States diplomacy was the transformation of the United States force (part of the multilateral peacekeeping force with France, Italy, and token British units) into a target for political activists of many confessions and persuasions. In October, 1983, the United States Marine barracks at the Beirut International Airport was attacked by terrorists, and 241 Americans were killed. What had begun as a mission designed to promote peace in Lebanon had turned to tragedy.

In the wake of the bombing, President Ronald Reagan declared Lebanon to be a United States vital interest and a key to the future of the Middle East. But the facts did not square with the pronouncement, and in February, 1984, the United States withdrew. In the process of disengaging, the United States undertook its first active military actions against Arabs—a fact not ignored throughout the region. In the end, United States involvement left Lebanon even less able to tend to its political future, ceded primacy to Syria, and saw Lebanon become the locus for further terrorism against Americans.

For at least its first six years, in the Middle East the Reagan administration acted from a perspective different from that of its immediate predecessors. The Egyptian-Israeli peace treaty seemed to reduce the need for the United States to take a lead in peacemaking. The Iran-Iraq war was largely beyond American influence—although the United States worked with Britain and France to secure freedom of navigation in the Persian Gulf. And the oil glut of the mid-1980's further reduced American awareness of the Gulf.

At the same time, the American people were turning inward after Watergate, Vietnam, and the hyperinflation of the Carter years. President Reagan himself has been domestically oriented. Foreign policy has been important to the President when there has been an immediate challenge or when foreign policy has had major domestic implications, as in the case of terrorism.

Meanwhile the administration's laissez-faire approach to Middle East problems has contributed to the worsening of the Western position there. For various local reasons that are largely related to social, political, cultural and economic developments, the role of the West and especially the United States has become more precarious in the area. This does not necessarily mean net gains for the Soviet Union. Despite diplomatic relations with Oman and the United Arab Emirates, the Soviet Union's influence in the Persian Gulf has not increased appreciably. Moscow has made little progress in Arab-Israeli diplomacy beyond its classic stance of "no war — no peace."

But by abstaining from its expected role, the United States has neither removed itself from danger nor increased the security of its interests. ■

WORLD POPULATION TRENDS

(Continued from page 19)

cover) presents summary information on these shifts. The share of the "South" within the global population increased from two-thirds in 1950 to three-fourths in 1985. The share of the combined population of Europe and the Soviet Union dropped from 22.8 percent to 15.8 percent. In 1950, the size of the population of North America (that is to say, the combined populations of the United States and Canada) was virtually the same as that of Latin America (including the Caribbean). By 1985, the size of Latin America's population exceeded the population of North America by 140 million.

PROJECTED TRENDS

Demographers looking into the future around 1950 were not notably successful in discerning its shape. Do they have reason to be more confident in the late 1980's? Are the improvements in forecasting, noted above, likely to stand the test of time? A sign of seemingly supreme confidence that these questions can be answered affirmatively is the existence of a flourishing minor industry preparing long-range demographic projections. The World

⁸For the latest set of these projections see K. C. Zachariah and My T. Vu, *World Population Projections, 1987-88 Edition: Short- and Long-Term Estimates* (Baltimore: The Johns Hopkins University Press, published for the World Bank, 1988), or the more accessible summary in Appendix Table 27 of *World Development Report 1988* (New York: Oxford University Press, 1988).

Bank, for example, annually makes detailed population projections up to the year 2150 for nearly 200 countries and territories.⁸ But these calculations, issued in periodic hefty volumes, do not really intend to imply that we can predict with some degree of assurance that indeed there will be 43,000 females between the ages of 20 and 24 in the Solomon Islands in the year 2125, or even that Nigeria's population in fact will be stabilized at 529 million — more than five times its present size — by the middle of the twenty-first century. Such calculations are merely hypothetical.

But for a more near-term future, say, for the 35-year period from 1985 to 2020, demographic projections can now be made with a somewhat greater assurance of success than was the case in 1950. This is because fertility and mortality changes during the last few decades greatly reduced the plausible range within which the future evolution of these variables will be constrained. The most important development in this regard was the major improvement in mortality conditions experienced in every major region, and especially in the South, during the first three decades of the twentieth century. The best single measure of that improvement is the expectation of life at birth. From the early 1950's to the early 1980's, the expectation of life at birth increased by more than 16 years in the "South:" from 41 years to nearly 58 years. The magnitude of this achievement cannot be overemphasized.

From the point of view of predicting the demographic future, these developments have a special significance. While further significant progress in reducing mortality is still possible and, indeed, is likely, much of the type of mortality change that can have a major effect on population growth through improvement of child survival (as distinct from increasing the proportion of persons surviving to old age) has already occurred. For example, in China and in Latin America, life expectancy at birth in the early 1980's was as high as life expectancy in Japan or in Europe in the early 1950's. An important exception is Africa. There, too, life expectancy has increased — from 38 years in the early 1950's to 50 years three decades later — but the scope for future improvement is still great enough to exert a major impact on population growth.

Recent fertility trends also narrowed the range of uncertainty concerning developments in the next few decades. Many formerly high fertility countries experienced major reductions in birthrates; these countries contain the majority of the population of the "South." The most spectacular change took place in China, where by the early 1980's fertility was more than 60 percent below its level of the early 1950's. But the corresponding declines were also

important—exceeding 30 percent—in Latin America and Southeast Asia. Outside China, fertility in most less developed countries is still a long way from replacement level—from families having two children on the average—but a good deal of the distance in that direction has already been traveled. The major exceptions are the countries of South Asia and West Asia (where the overall decline was a modest 16 percent) and especially the countries of Africa (where the average level of fertility remains largely unchanged). In the “North,” the post-World War II upsurge of fertility proved temporary. Between the early 1950’s and the early 1980’s, fertility in North America declined by almost 50 percent, and the corresponding declines exceeded 30 percent in Europe, Japan and Oceania. In the North as a whole, fertility has now fallen below the level that, in the long run, would maintain the population at its present size. Growth is still continuing at a modest rate.

The developments just outlined make the task of demographic forecasting considerably easier than was the case around 1950. Both demographic history and population theory suggest the likelihood that once premodern patterns of fertility behavior are broken, the main tendency is toward increasing limitation of births, with reversals that are only temporary, if they occur at all. There is, perhaps, a lower limit to fertility decline: societies, unless they are resigned to disappearing from the human family, will manage to keep fertility at replacement level. As to mortality, the conventional wisdom holds that over time longevity has nowhere to go but up, with a likely upper limit of the expectation of life in the neighborhood of 80 years, and with the laggard countries catching up, more or less speedily, with those in the vanguard of progress.

It is, of course, possible to counter such assumptions with a good dose of skepticism. Significant mortality reversals did occur in many countries in the past, although for a persuasive example of a calamity that actually reduced global population one has to go back to the fourteenth century. A virus, nastier than the one that caused the influenza pandemic after World War I, may ambush mankind. In the past, war has been an ineffective regulator of total population size; in a future war, waged with nuclear or bacteriological and chemical weapons, this need not be so.

In formerly high fertility countries, like China, where fertility decline is induced by deliberate policy, a relaxation of social controls may cause fertility to rise again. Finally, and most important, it is not clear that countries where fertility is still high will naturally embark on a course of fertility decline

that replicates earlier transition experiences, or that such countries have the capacity to induce fertility decline if and when a slowing down of rapid population growth is recognized in the collective interest.

Still, the character of the most plausible surprise-free demographic scenario for the near-term future is fairly well agreed on. Its central, if unabashedly optimistic assumption, is an orderly and fairly rapid convergence, in all countries, of low fertility and mortality levels: levels just sufficient to maintain population size in a stationary state. Table 1 summarizes the results of one set of such projections—those of the United Nations “medium” series—for the year 2020, and indicates the growth rate and the absolute increases in population size that they imply for the 35-year period from 1985 to 2020.⁹ Table 2 indicates the further shifts in the regional composition of the world’s population that the projected changes in population size will generate by 2020.

The calculations incorporated into Table 1 and Table 2 posit steady and fairly rapid further improvements of mortality in all countries. By 2020, expectation of life at birth is assumed to be 70 years or longer in all regions except Africa, where it will fall short of that figure only by about 6 years. In short, the projections assume that for all practical purposes the mortality transition will be completed by the early twenty-first century.

For fertility, the projections assume that China will succeed in keeping its fertility appreciably below replacement level throughout the 35-year period and that the regions of the North will stabilize their fertility at about present levels. In the rest of the world, the projections assume that all regions, with the exception of Africa, will experience continued rapid declines in fertility and will reach replacement or near-replacement levels by 2020. As for Africa, a major—44 percent—drop in fertility is assumed, which, by 2020, would bring African fertility to a level equal to United States fertility in the early 1950’s.

Clearly, these are highly optimistic assumptions. Successful realization of both the fertility and mortality scenarios envisaged in the projections would require a felicitous combination of enlightened public policies and a good measure of luck. Yet the figures of Tables 1 and 2 suggest that population growth will remain a major challenge to successful development in the decades to come and a factor that will exert an increasingly important influence on international relations. Between 1985 and 2020, the net addition to the world population will be 3.2 billion, making the global population exceed 8 billion. Thus, in the brief period of 35 years, the net addition to population will be twice the size of the

(Continued on page 64)

⁹See *World Population Prospects*, op. cit.

THE MONTH IN REVIEW

A Current History chronology covering the most important events of November, 1988, to provide a day-by-day summary of world affairs.

INTERNATIONAL

Angolan Peace Plan

Nov. 22—South African Foreign Minister Roelof Botha says that South Africa has agreed to the terms of a peace accord for Angola and Namibia; details of the agreement remain to be settled.

International Bank for Reconstruction and Development (World Bank)

Nov. 10—The 151 nations belonging to the World Bank approve a loan of \$17.9 million to Poland to aid it in exporting fresh produce to West European countries.

Iran-Iraq War

Nov. 24—Iran and Iraq begin a 10-day program to exchange wounded and sick prisoners of war.

Nov. 27—Iran suspends its prisoner of war exchange with Iraq claiming that the exchange is unequal.

Organization of American States (OAS)

(See also *U.S., Foreign Policy*)

Nov. 13—The OAS members begin their 18th general assembly meeting in San Salvador.

Organization of Petroleum Exporting Countries (OPEC)

Nov. 24—Meeting in Vienna, OPEC oil ministers conclude a tentative agreement on a production ceiling of 18.5 million barrels of oil per day. Iraq is allowed to produce as much oil as Iran produces, but the Iranian government must agree to this provision.

Nov. 27—Iran agrees to permit Iraq equal oil production ceilings, but Saudi Arabia demands that OPEC set a bottom price of \$15 per barrel for its oil.

Nov. 28—Saudi Arabia withdraws its objections and the 13 OPEC members sign an agreement limiting OPEC production to 18.5 million barrels of oil per day and endorsing an attempt to increase the price of oil to \$18 per barrel.

Palestine Liberation Organization (PLO)

(See also *Intl, UN; Egypt; Israel; U.S., Foreign Policy*)

Nov. 15—Speaking to a special session of the Palestine National Council (PNC) in Algiers, PLO chairman Yasir Arafat proclaims an independent state of Palestine, "with holy Jerusalem as its capital." During the session, the PNC says that UN Resolutions 242 and 338, which implicitly acknowledge the right of Israel to exist, should be the basis for a negotiated settlement; the PNC also condemns terrorism as it is defined in UN resolutions.

United Nations (UN)

(See also *U.S.S.R.; U.S., Foreign Policy*)

Nov. 11—Voting 122 to 19 with 13 abstentions, the General Assembly condemns the Vietnamese occupation of Cambodia and warns that "the universally condemned policies of a recent past," during the Khmer Rouge regime, must not be restored.

The General Assembly votes 130 to 2 to condemn the Israeli suppression of the Palestinian uprising in its occupied territories.

Nov. 27—Arab nations at the UN say that they have more than enough votes to ask the UN to move the General Assembly agenda to Geneva to make it possible for the PLO chairman,

Yasir Arafat, to address the Assembly.

Nov. 28—U.S. State Department spokesman Charles Redman says that the U.S. will not oppose a special UN session in Geneva held in order to allow PLO chairman Arafat to address the body; the U.S. will be represented.

Nov. 30—In the General Assembly, 151 nations vote for a resolution asking the U.S. to reverse within 24 hours its decision not to allow Yasir Arafat a visa to enter the U.S. to address the UN. Only Israel and the United States vote against the resolution.

AFGHANISTAN

(See also *U.S.S.R.; U.S., Foreign Policy*)

Nov. 17—Deputy Foreign Minister Abdul Ghafter Lakanwal defects to the U.S.; Lakanwal is the highest ranking Afghan defector to the West since 1979.

Nov. 27—For the 1st time since the Soviet invasion, representatives of the Afghan guerrillas meet with Soviet officials in Pakistan to discuss the release of Soviet prisoners of war.

ALGERIA

Nov. 3—According to the official returns, 92 percent of the voters approve President Chandra Benjedid's proposed constitutional revisions.

Nov. 28—A 2-day congress of the ruling National Liberation Front party ends after approving political reforms leading to a multiparty system.

ANGOLA

(See *Intl, Angolan Peace Plan*)

BRAZIL

Nov. 16—In nationwide municipal elections, Brazil's leftist political parties win control of the major cities in central and southern Brazil. President José Sarney's Brazilian Democratic Movement party (PMDB), which dominated municipal elections in 1986, is defeated.

Nov. 21—The strike against the government-owned Petrobras oil company, which began on November 12, ends when unions accept wage increases from the government.

CAMBODIA

(See *Intl, UN*)

CANADA

Nov. 21—Prime Minister Brian Mulroney's Progressive Conservative party wins 170 of the 295 seats in elections for the House of Commons. Mulroney's victory against John Turner's Liberal party and the New Democratic party practically ensures passage of the free trade agreement with the U.S.

CZECHOSLOVAKIA

Nov. 13—In his first trip to the West since 1969, former Communist leader Alexander Dubcek speaks in Italy, where he defends the Prague Spring of 1968 as an attempt to promote "socialism with a human face."

EGYPT

(See also *Iraq; U.S., Foreign Policy*)

Nov. 20—Egypt says that it will recognize Palestine, the in-

dependent state declared by the PNC on November 15.

GERMANY, WEST

(See also *U.S., Foreign Policy*)

Nov. 10—During a speech by Speaker of the Bundestag Philipp Jenninger on the 50th anniversary of Kristallnacht (a nationwide anti-Jewish Nazi pogrom in 1938), some members of the Bundestag walk out because they object to what they regard as Jenninger's sympathetic tone toward the Nazis.

Nov. 11—Philipp Jenninger resigns as Speaker of the Bundestag.

HAITI

Nov. 6—Colonel Jean-Claude Paul, who commanded the country's most feared army battalion and is under indictment in the U.S. on drug trafficking charges, dies at his home. Colonel Paul was dismissed from the army on September 30 after Haiti's latest coup.

Nov. 7—Relatives speculate that Colonel Jean-Claude Paul was poisoned. The colonel, who collapsed after eating soup, was originally believed to have died of a heart attack.

HUNGARY

Nov. 23—Miklos Nemeth is nominated as Prime Minister; Nemeth replaces Karoly Grosz, but Grosz will remain as head of the Communist party.

INDIA

(See *Maldives; Pakistan; U.S.S.R.*)

IRAN

(See *Intl, Iran-Iraq War, OPEC; U.K., Great Britain*)

IRAQ

(See also *Intl, Iran-Iraq War, OPEC*)

Nov. 21—President Saddam Hussein orders his eldest son to go on trial for the October murder of a presidential guard.

Nov. 28—President Hussein makes an unexpected visit to Egypt to confer with Egyptian President Hosni Mubarak about the fate of the Palestinians in Israel.

ISRAEL

(See also *Intl, PLO, UN; Iraq; Pakistan; U.S., Foreign Policy*)

Nov. 2—In the final results of the November 1 national elections, the Labor party and its left-wing allies gain 48 seats in the Knesset, while the Likud party and its rightist allies win 46 seats. Members of Israel's right-wing religious bloc win 18 seats and are expected to side with the Likud party coalition in forming a new government.

The PLO terms the election result a "fatal blow" to the peace process and a catalyst for "hatred and terrorism" toward Palestinians.

Nov. 3—Prime Minister Yitzhak Shamir, the leader of the Likud party, meets with the leadership of the religious right to discuss a coalition government.

Nov. 11—Shamir tells the leaders of the religious right that he will help change the law that defines who is a Jew. The proposed definition is opposed by American Conservative and Reform Jews and by many Israelis.

Nov. 15—President Chaim Herzog asks Prime Minister Shamir to form a government. Shamir says that his Likud party will not share power with the Labor party as it did in Israel's national unity government.

Nov. 21—Foreign Minister Shimon Peres says that Labor has broken off talks with Likud and is unwilling to join a national unity government.

Nov. 25—The army sentences 21 paratroopers to jail terms of 1 to 2 weeks; in a Palestinian refugee camp on November 20,

the soldiers broke windows and attacked automobiles when their bus was stoned by refugees.

Nov. 28—Talks between Likud and Labor leaders reopen in an effort to form a new coalition.

Nov. 30—By a vote of 61 to 57, the leadership of the Labor party decides to discontinue negotiations with the Likud party over the formation of a coalition government.

JAPAN

(See also *U.S., Economy; Foreign Policy*)

Nov. 1—Japan's major utilities companies announce that they will stop importing uranium from South Africa.

Nov. 16—Japan's Lower House approves wide-ranging tax reforms after an all-night session. Prime Minister Noboru Takeshita tied his political career to the tax measures, which include tax cuts and a new 3 percent sales tax.

KOREA, NORTH

(See *Korea, South*)

KOREA, SOUTH

Nov. 5—Violence that began on November 3 continues in Seoul as riot police battle protesters; the demonstrations were triggered by the recent parliamentary investigation of the alleged transgressions of former President Chun Doo Hwan.

Nov. 17—North Korea and South Korea agree on a basic format for joint parliamentary talks on lessening tensions between the 2 nations.

Nov. 22—In a televised address, former President Chun Doo Hwan apologizes for abuses of power committed during his 8-year rule.

Nov. 26—President Roh Tae Woo asks South Koreans to forgive former President Chun Doo Hwan for "misuse of state power in the past era."

LEBANON

Nov. 9—Adel Osseiran, the defense minister in the Muslim-backed Cabinet, fires General Michel Aoun as commander of the army. General Aoun is the Prime Minister of Lebanon's other Cabinet, which is supported by Christians. Lebanon has had 2 competing Cabinets since President Amin Gemayel's term expired in September.

Nov. 26—Syrian troops enter West Beirut to end 4 days of heavy fighting between 2 rival Muslim factions, the Amal militia and the Hezbollah militia.

MALDIVES

Nov. 3—A coup attempt against the government of President Maumoon Abdul Gayoom is foiled when Indian troops arrive in the capital. A group of 150 mercenaries is believed to have initiated the attack.

Nov. 4—Some of the mercenaries involved in the attempted coup flee on board a commandeered ship, taking civilians as hostages.

Nov. 6—After a 2-day pursuit, the Indian navy forces the surrender of the Maldivian rebels and mercenaries; according to the Indian government, 4 of the 20 hostages were killed when Indian forces stormed the ship.

MEXICO

(See *U.S., Foreign Policy*)

NAMIBIA

(See *Intl, Angolan Peace Plan*)

NICARAGUA

(See also *U.S., Foreign Policy*)

Nov. 1—The government extends its truce with the contras.

Nov. 6—The government prohibits opposition groups from receiving financial aid from the U.S. government. Violators will be charged with treason.

PAKISTAN

(See also *Afghanistan; U.S.S.R.; U.S., Foreign Policy*)

Nov. 15—A study released by the Carnegie Endowment for International Peace says that Pakistan possesses nuclear weapons. The study places Pakistan in a group of nations including India, Israel and South Africa that possess nuclear weapons but will not admit it.

Nov. 17—The final count of the November 16 National Assembly elections is released. Benazir Bhutto's Pakistan People's party (PPP) won 92 seats, the largest number of seats in the 215-seat Parliament. The PPP's major competitor, the Islamic Democratic Alliance, gains 54 seats; the remaining 40 seats are divided among smaller parties and independent candidates.

Benazir Bhutto asks Pakistan's Acting President to invite her to form a government.

Nov. 18—Elections for provincial assemblies are held, with the conservatives winning 3 of the 4 provinces.

PHILIPPINES

Nov. 12—Romulo Kintanar, the reputed leader of the Communist New People's Army, escapes from military custody.

POLAND

(See also *Intl, World Bank*)

Nov. 2—Workers demonstrate at the Gdansk shipyard to protest its December 1 scheduled closing by the government.

Nov. 4—British Prime Minister Margaret Thatcher ends a 3-day visit after meeting with labor leader Lech Walesa in Gdansk and with the Polish President, General Wojciech Jaruzelski.

Nov. 6—In response to the government's threatened closure of the Gdansk shipyard, Lech Walesa calls for a strike alert November 8.

Nov. 8—Workers at 2 shipyards in Gdansk stage a wildcat strike despite the objections of Lech Walesa.

Nov. 9—Shipyard workers in Gdansk end their 2-day wildcat strike in response to pleas from Walesa.

Nov. 30—Lech Walesa appears on Polish television in a debate with the head of the government-endorsed labor union. Walesa asks for government recognition of the outlawed Solidarity labor union.

SAUDI ARABIA

(See *Intl, OPEC*)

SOUTH AFRICA

(See also *Intl, Angolan Peace Plan; Japan; Pakistan*)

Nov. 1—The government prohibits *The Weekly Mail*, the nation's most famous opposition newspaper, from operating in the month of November.

Nov. 18—The 3-year trial of antiapartheid black leaders belonging to the United Democratic Front ends in Pretoria; of the 19 defendants, 4 are found guilty of treason, 7 are convicted of terrorism and 8 are acquitted. Under South African law, both treason and terrorism are capital crimes.

Nov. 23—President P. W. Botha commutes the death sentences of the "Sharpeville Six," a group of 6 blacks convicted as accessories to the killing of a black councilman in 1984. The group, the subject of an international appeal for clemency, is sentenced to jail terms ranging from 18 years to 25 years.

Nov. 24—The government says that imprisoned African National Congress leader Nelson Mandela will not be returned to prison when he leaves the hospital where he is recovering

from tuberculosis. The government does not say where Mandela will be housed.

SUDAN

Nov. 15—The Democratic Unionist party, a member of the ruling multiparty coalition, signs a cease-fire agreement with the rebel Sudan People's Liberation party. The agreement is not openly endorsed by the other parties in the ruling coalition.

SYRIA

(See *Lebanon*)

U.S.S.R.

(See also *Afghanistan; U.S., Foreign Policy, Science and Space*)

Nov. 4—The Soviet Union says that because of Pakistan's "glaring violations" of the Geneva agreement, it is suspending the withdrawal of its troops from Afghanistan. The Soviet withdrawal was delayed in August because of the activities of Afghan guerrillas.

Nov. 10—The Politburo promises to take action to increase the economic and political independence of the Soviet republics. The republics of Estonia, Lithuania and Latvia have been vocal opponents of constitutional reforms that would give the central government veto powers over their governments.

Nov. 15—The space shuttle *Buran* is successfully launched and returns to Earth after a 200-minute trip.

Nov. 16—In a unanimous vote, Estonia's legislature amends the republic's constitution to allow Estonia to veto laws imposed by the Soviet government.

Nov. 18—Soviet President Mikhail Gorbachev travels to India for a 3-day official visit.

Nov. 20—The Soviet Union and India call for an international conference to discuss violations of the UN-sponsored Geneva agreement on the Soviet withdrawal from Afghanistan.

Nov. 22—The government of Latvia decides not to press for sovereignty over Soviet legislation. Lithuania's parliament takes similar action; Estonia is the only Baltic state pressing for veto power over central government legislation.

Nov. 23—Rioting in Azerbaijan over the Nagorno-Karabakh Autonomous Region leaves 3 soldiers dead and 126 people injured.

Nov. 24—Moscow orders a nighttime curfew in Baku, Azerbaijan's capital, and the region is closed to foreign reporters.

Nov. 25—Moscow orders a curfew and a ban on demonstrations in Yerevan, the capital of Armenia.

Nov. 26—The Presidium of the Supreme Soviet invalidates the claim of the Estonian parliament that Estonia can veto Soviet legislation.

In a nationwide speech, President Gorbachev condemns the recent ethnic unrest in the Soviet Union, charging that it is endangering perestroika, his economic reform program.

Nov. 28—The Central Committee approves legislative reforms proposed by President Gorbachev; the reforms have been opposed strongly by leaders in the Baltic states.

Nov. 29—The Supreme Soviet begins a special 3-day session to discuss the reform measures approved by the Central Committee on November 28.

President Gorbachev addresses the Supreme Soviet, saying that he is willing to accept limits on his presidential powers if the Supreme Soviet approves the legislative reform package.

Nov. 30—For the 1st time in 38 years, the Soviet Union stops jamming the broadcasts of the Radio Free Europe/Radio Liberty radio stations.

Official reports from Armenia and Azerbaijan state that as many as 18 people have died in the ethnic unrest in the region that began on November 23.

UNITED KINGDOM

Great Britain

(See also *Poland; U.S., Foreign Policy*)

Nov. 10—After talks in Vienna, Great Britain and Iran restore full diplomatic relations.

UNITED STATES

Administration

Nov. 9—President-elect George Bush names James Baker 3d as his secretary of state.

President Ronald Reagan requests the resignation of all Cabinet members and politically appointed officials to give President-elect George Bush more flexibility in his new appointments.

Nov. 11—The Farmers Home Administration says that it will send loan delinquency notices to some 80,000 farmers to warn them that they may be subject to foreclosure.

Nov. 14—The Department of Transportation orders the random testing for drug abuse of some 4 million private sector transportation workers in airline, interstate trucking, railroad and bus transportation.

Nov. 15—President-elect Bush announces that Nicholas F. Brady will remain as secretary of the treasury in his administration.

Nov. 17—President-elect Bush names New Hampshire Republican Governor John H. Sununu as his White House chief of staff.

Nov. 18—President Ronald Reagan issues an executive order that will give the Nuclear Regulatory Commission (NRC) the power to adopt emergency evacuation plans for areas around nuclear power plants; in effect this will permit the NRC to license the plants to open even if they have been kept closed by state and local regulations.

Nov. 21—President-elect Bush names Robert Darman as director of the Office of Management and Budget and retains Richard Thornburgh as attorney general and Lauro Cavazos as education secretary.

Nov. 23—George Bush names Brent Scowcroft as his national security adviser.

Economy

Nov. 1—The Commerce Department reports that its index of leading economic indicators declined 0.1 percent in September.

Nov. 4—The Labor Department reports that the nation's unemployment rate declined to a 14-year low of 5.2 percent in October.

Nov. 10—The Labor Department reports that its producer price index remained unchanged in October.

Nov. 16—The Commerce Department reports that the nation's foreign trade deficit declined to \$10.56 billion in September.

Federal Reserve Board chairman Alan Greenspan warns that the U.S. deficit must be reduced soon because "the effects of the deficit will be increasingly felt and with some immediacy."

Nov. 22—The Labor Department reports that its consumer price index rose 0.4 percent in October.

Nov. 23—The dollar falls to a 40-year low against the Japanese yen, 121.05 yen to the dollar.

Nov. 28—Most major banks raise their prime lending rate to 10.5 percent.

The Commerce Department reports that the nation's foreign trade deficit for the 3d quarter of 1988 fell to \$28.53 billion.

Nov. 29—The Commerce Department reports that the nation's gross national product (GNP) grew at an annual rate of 2.6 percent in the 3d quarter of 1988.

Foreign Policy

(See also *Intl, UN; Afghanistan; Canada; Haiti; Israel; Nicaragua*)

Nov. 1—State Department spokesman Charles Redman says the U.S. has learned that the Soviet Union has recently deployed advanced missiles in Afghanistan's capital, Kabul; the U.S. considers these missiles a threat to Pakistan.

In Cairo, Defense Secretary Frank Carlucci and Egypt's Defense Minister Abdel Halim Abu Ghazala sign an agreement under which Egypt will furnish parts for some 40 percent of the advanced U.S. Abrams tanks.

The U.S. and 24 other countries sign an international agreement to freeze, at present levels, the emission of nitrogen oxides considered a major source of acid rain.

Nov. 14—At the OAS General Assembly, Secretary of State George Shultz continues to express U.S. support for the Nicaraguan contras, although he does not call for renewed U.S. military aid for them.

Former Senator Mike Mansfield (D., Mont.) resigns as Ambassador to Japan after eleven and one-half years in the post.

Soviet physicist and human rights advocate Andrei Sakharov meets in the White House with President Reagan; this is his 1st visit to the U.S.

Nov. 15—White House spokesman Marlin Fitzwater says that the declaration by the Palestine National Council (PNC) about Palestinian statehood and the PLO's implied recognition of Israel do not meet U.S. conditions for negotiations with the PLO.

West German Chancellor Helmut Kohl meets President Reagan in the White House.

It is reported that Soviet President Mikhail Gorbachev will meet President Reagan and President-elect George Bush in early December in Washington, D.C.

Nov. 16—The State Department and President-elect Bush's advisers say that the PNC's implied recognition of Israel does not meet U.S. requirements; 24 countries have recognized the newly declared Palestinian state.

President Reagan meets British Prime Minister Margaret Thatcher in a farewell gesture in Washington, D.C.

Nov. 22—In Texas, George Bush and Mexico's President-elect Carlos Salinas de Gortari meet to discuss U.S.-Mexican relations.

It is announced that President Reagan, President-elect Bush and Soviet President Gorbachev will meet at a luncheon in New York on December 7.

Nov. 25—PLO chairman Yasir Arafat applies at the U.S. embassy in Tunisia for an entry visa to the U.S. in order to address the UN General Assembly.

Nov. 26—Secretary of State George Shultz decides not to waive a U.S. law denying entrance to the U.S. of individuals identified as terrorists; he refuses to grant Arafat a visa.

Nov. 28—After 8 months of negotiation, the U.S. and the Soviet Union agree to extend a grain purchase agreement, retroactive to October 1, 1988, to December 31, 1990, which will allow the Soviet Union to purchase millions of tons of U.S. grain.

Legislation

Nov. 1—The copyright revision bill is signed by President Ronald Reagan.

Nov. 2—President Ronald Reagan signs legislation requiring the Environmental Protection Agency to develop a system of tracking and controlling the disposal of medical waste.

Nov. 3—President Reagan vetoes a measure designed to preserve 1.4 million acres of forest in Montana as wilderness.

Nov. 4—President Ronald Reagan signs legislation allowing the U.S. to become the 98th nation to sign the 1948 Genocide Convention.

Nov. 5—President Reagan pocket vetoes a bill imposing what he calls "unconstitutional" restrictions on television programming for children.

Nov. 11—President Reagan signs a bill to correct some errors in the 1986 Tax Reform Law and to establish a taxpayer "Bill of Rights."

Nov. 18—President Reagan signs new comprehensive drug control legislation that allows the death penalty under some conditions for drug dealers.

Nov. 19—Among 11 pieces of legislation signed by President Reagan is a measure setting up a research program for the study of super-conductivity, and legislation for stiffer penalties for insider stock trading and for contractors defrauding the government.

Nov. 23—President Reagan pocket vetoes legislation that would have tightened restrictions on the lobbying activities of former government officials and members of Congress.

Nov. 29—The Democratic majority in the Senate selects Maine's Senator George J. Mitchell as majority leader.

Senator Robert Dole (R., Kans.) is returned as minority leader of the Senate.

Military

Nov. 3—A graduate student introduces a computer virus into the nation's system of military, corporate and university computer networks, disrupting the system completely.

Nov. 4—The Defense Department says that the computer virus infecting the nation's computer networks has been completely eradicated. The department says that no military secrets were involved and no data was destroyed.

Nov. 9—Following yesterday's crash of a B-1B bomber, the Strategic Air Command grounds the new planes indefinitely.

Nov. 22—The Defense Department unveils its B-2 Stealth bomber, which is designed to evade radar detection.

Nov. 23—The Defense Security Assistance Agency announces plans to insist that foreign countries receiving U.S. military aid must agree to cooperate with investigations of fraud in the transaction before receiving aid.

Nov. 30—The Defense Department temporarily takes its non-military computer system out of the nationwide computer network that was infected with a computer virus.

Politics

Nov. 8—Vice President George Bush wins the 1988 presidential election, receiving 53 percent of the vote. Massachusetts Governor Michael Dukakis, the Democratic contender, takes 45 percent of the vote. Bush wins the electoral vote 426 to 112. Senator Dan Quayle (R., Ind.) wins the Vice Presidency.

Democrats win 5 more House seats, to give them a 262-173 advantage; all seats were up for election.

In the Senate, Democrats hold 55 seats, pending the outcome of a disputed election in Florida; 33 seats were up for election.

Democrats make a net gain of 1 governorship and maintain majorities in the state legislatures.

Nov. 10—Florida conservative Republican Connie Mack wins a contested Senate seat. The Democrats hold 55 seats; 45 seats are held by the Republicans.

Political Scandal

Nov. 30—White House spokesman Marlin Fitzwater says that President Reagan will not release some secret documents that former national security adviser Oliver North may need for his defense in his criminal trial. Because of this action, several charges against North may be dropped.

Science and Space

Nov. 10—The Department of Energy announces that Texas will be the site of the projected \$4.4 billion super collider atom

smasher that will be the largest and most costly scientific project in the world.

After negotiating for a week in Washington, D.C., U.S. and Soviet scientists agree on cooperation for a planned 1994 Soviet unmanned space mission to land on Mars.

Nov. 16—The 300-foot radio telescope operated by the National Radio Astronomy Observatory at Green Banks, West Virginia, collapses from unknown causes; this is a serious setback to U.S. astronomical research.

Supreme Court

Nov. 7—The Court refuses to hear a lower court decision that racial quotas in a Brooklyn housing complex violated federal law even though they were intended to promote desegregation.

Nov. 8—The Court rules 9 to 0 to uphold a lower court ruling that allows states to tax income on oil and gas from offshore sites.

Nov. 29—The Court rules 6 to 3 to overturn a lower court decision, saying that "carelessness or negligence" by police in mishandling evidence possibly vital to a defendant does not violate the defendant's constitutional rights unless it is done in "bad faith."

VIETNAM

(See *Intl, UN*)

YUGOSLAVIA

Nov. 19—A crowd of 600,000 gathers in Belgrade to protest the rise of ethnic Albanian nationalism in Kosovo Province. The Tanyug news agency claims that the demonstration is the largest in the history of Yugoslavia.

Nov. 21—For the 5th consecutive day, ethnic Albanians in Kosovo Province protest in the provincial capital of Pristina.

Nov. 23—Public demonstrations are banned in Kosovo Province in an attempt to quell unrest among ethnic Albanians in the region. ■

WORLD POPULATION TRENDS

(Continued from page 59)

global population in 1900. The countries of the South, mostly still poor, will have to absorb some 95 percent of this increase, more than 3 billion. Africa alone will increase its population by nearly 900 million, a number equivalent to the combined current populations of Europe, North America and Japan. The share of the population of the now advanced industrial countries in the world's total will diminish at an accelerating pace. By 2020, the two current superpowers will represent a bare 8 percent of the world's population, and Europe's share will be less than half of what it was in 1950.

On the other hand, while the global population will probably still be growing around 2020, and continued demographic expansion will most likely bring the global population beyond the 10-billion mark before the end of the twenty-first century, realization of the fertility and mortality trends envisaged in the projections would mean that the historic world demographic transition had been essentially completed. Humankind could begin single-mindedly to concentrate on making life better, rather than devoting much of its energy to the task of accommodating greater numbers. ■

GLOBAL POPULATION ESTIMATES AND PROJECTIONS

TABLE 1: Estimates and projections of the population size, average annual growth rate, and absolute population increase by regions, 1950-2020.

REGION	Total population (millions)			Growth rate (percent)		Absolute Increase (millions)	
	1950	1985	2020	1950- 1985	1985- 2020	1950 1985	1985- 2020
North America	166.1	264.8	327.2	1.33	0.60	98.7	62.4
Europe	392.5	492.2	513.8	0.65	0.12	99.7	21.6
USSR	180.1	276.9	343.2	1.23	0.61	96.8	66.3
Japan	83.6	120.8	129.9	1.05	0.21	37.2	9.1
Oceania	12.6	24.6	37.3	1.91	1.19	12.0	12.7
"NORTH"	834.9	1179.3	1351.4	.99	.39	344.4	172.1
China	554.8	1059.5	1459.8	1.85	0.92	504.7	400.3
Southeast Asia	215.0	469.8	839.4	2.23	1.66	254.8	369.6
South Asia	521.1	1184.2	2317.9	2.35	1.92	663.1	1133.7
Africa	224.1	557.4	1441.3	2.60	2.71	333.3	883.9
Latin America	165.4	403.6	719.0	2.55	1.65	238.2	315.4
"SOUTH"	1680.4	3674.5	6777.4	2.24	1.75	1994.1	3102.9
WORLD TOTAL	2515.3	4853.8	8128.8	1.88	1.47	2338.5	3275.0

TABLE 2: Percentage distribution of the world's population by regions; estimates and projections 1950-2020.

REGION	1950	1985	2020
North America	6.6	5.5	4.0
Europe	15.6	10.1	6.3
USSR	7.2	5.7	4.2
Japan	3.3	2.5	1.6
Oceania	0.5	0.5	0.5
"NORTH"	33.2	24.3	16.6
China	22.0	21.8	18.0
Southeast Asia	8.6	9.7	10.3
South Asia	20.7	24.4	28.5
Africa	8.9	11.5	17.7
Latin America	6.6	8.3	8.9
"SOUTH"	66.8	75.7	83.4
WORLD TOTAL	100.0	100.0	100.0

Sources, Tables 1 and 2: *World Population Prospects: 1988* (New York: United Nations, 1988).

Coming Next Month: The Middle East, 1989 – February, 1989

Our February, 1989, issue on the latest developments in the Middle East will discuss the turmoil in Israel, the Iran-Iraq conflict, Egypt, Jordan, the Palestinian question and the crisis in Lebanon. In addition, United States foreign policy in the region will be evaluated.

United States Policy in the Middle East

by LEONARD BINDER, University of California,
Los Angeles

Israel

by AVNER YANIV, University of Haifa

The Palestinians

by AARON DAVID MILLER, United States Department
of State

Syria and Lebanon

by ITAMAR RABINOVICH, Tel Aviv University

Iran

by GRAHAM FULLER, The Rand Corporation

Egypt

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